

# Renault Trucks D Wide / C Cab 2.3m





### Welcome on board your RENAULT TRUCKS vehicle

You have now taken possession of your new vehicle.

We hope that it brings you all the satisfaction you have the right to expect from it and which was the reason for your choice.

This driver's handbook gives you the information you need to:

- become familiar with your RENAULT TRUCKS vehicle and thus take full advantage of all the technical improvements it incorporates, in the best operating conditions;
- guarantee optimum operation on a permanent basis by the simple but rigorous observation of the service advice;
- resolve minor incidents not requiring input from a specialist without losing too much time.

# RENAULT TRUCKS

# NU 3973 - RENAULT TRUCKS D Wide / C Cab 2.3 m

Public limited company with capital of €50,000,000

Head office: 99. route de Lvon

69802 Saint-Priest

Siret 954 506 077 00 120 - RCS LYON B 954 536 077

The manufacturer reserves the right to make any modifications deemed necessary during production.

This Operating Manual should therefore not be considered as a specification for the model in question.

© RENAULT TRUCKS SAS - 2021



# **TABLE OF CONTENTS**

Foreword	6
Locking and Alarm	
Vehicle exterior	24 26
Cab tilting	
Driver environment  Driving position	40 59 71
Living	92 98 . 115
Safety	<b>128</b> 128
Vehicle operating instructions  Vehicle operating instructions	<b>136</b>
<b>Driving advice</b> Driving advice	
Daily checks	
Start-up and driving  Before starting Start-up On the road Diesel particulate filter Automated gearbox. Retarder Driving on difficult terrain Stop Air suspension	156 161 166 195 202 215 219 225
External equipment - control/management  External equipment - control/management	<b>232</b> 232
Servicing and maintenance	240

# **TABLE OF CONTENTS**

Maintenance recommendations  Maintenance operations  Cleaning	264
Breakdowns - quick fixes	280
Breakdowns - quick fixes	

# Access to the Driver Guide



#### To use the Driver Guide:

 Go to: https://driverguide.renault-trucks.com/

or

scan the QR code to find the driver guide app.

or

 search for "...Renault Trucks Driver Guide" in your app download site.



You will find all the necessary information relevant to your specific Renault Trucks vehicle.

We reserve the right to make changes to this publication in the interests of constantly improving our output. The digital version will always contain the most up-to-date information.



Foreword

# Welcome on board your RENAULT TRUCKS vehicle

The few moments you spend reading this handbook will be amply repaid by what you learn from it and the new technical features you will find in it. And if some points are still unclear, our network technicians will be pleased to provide you with any further information you wish to obtain.



Although intended to reflect your vehicle configuration as closely as possible, these instructions can sometimes mention certain options that are not available on this vehicle or images that offer slightly different solutions from those presented on your vehicle.

If in any doubt, please contact the nearest Renault Trucks service point.

### Reference language

Our instructions are published in French then translated into your language by professional translators. Translation errors can nevertheless slip into our lines, so, in case of doubt, the French version of the digital Driver Guide will always prevail over all the others.

### Reading notes:

The references, digits or letters mentioned in the text refer to two types of illustration:

- Digits correspond to figures or photos near the text.
- Letters, possibly followed by a digit, correspond to the vehicle instrument panel diagram inside this handbook.

Happy driving at the wheel of your RENAULT TRUCKS vehicle!

#### RENAULT TRUCKS: a cross-border service

RENAULT TRUCKS 24/7 has already been working in Europe for several years.

There are 19 emergency call centres ready to take your calls 365 days a year.

Spare parts homologated by RENAULT TRUCKS meet the requirements of the technical specification and comply with regulations. Only they can bring you:

- the safety of perfect conformity.
- the manufacturer's warrantv.
- maintenance of the original specifications and performance.

# General operating instructions for commercial vehicles

Depending on your vehicle's equipment

Whether you are a professional driver, a haulier driving your own vehicle or a haulier entrusting the vehicle to one of your company employees, it is essential to follow and ensure the application of the following instructions; they are only a reminder of the basics of the trade and standard professional practice and are in no way to be taken as

exhaustive. In this way you will obtain the maximum benefit from your vehicle and prevent any risk of accidents or incidents.

#### 1. Some basic instructions

- The driver must hold all the necessary licences and should drive only when physically fit and sufficiently rested.
- The vehicle must comply with the regulations in the country or countries in which it is used.
- Any dangerous goods indicator panels must be present and in good condition.
- Loads:
  - total or per-axle weights (regulatory or technical) must not be exceeded,
  - loading and securing of loads must be carried out using conventional procedures. Tarpaulins and side curtains must be correctly stretched and fastened, and doors and sideboards locked, etc.

#### In the cab:

- never carry dangerous products (petrol, trichlorethylene, thinners, etc.),
- if an animal is carried, it must be kept away from the driving position.

#### Access and descent:

- use the steps and handles provided for this purpose. Never jump out of the vehicle. When descending, watch out for the traffic flow, particularly after a long period of driving,
- extra care should be taken when weather conditions are bad (rain, snow, ice) or when it is dark.



#### USE IN CLOSED PREMISES:

 NEVER LEAVE THE ENGINE RUNNING IN CLOSED AND/OR POORLY VENTILATED PREMISES. THE EXHAUST GASES CONTAIN HIGHLY TOXIC COMPONENTS. IN CONCENTRATION THEY CAN HAVE VERY SERIOUS EFFECTS ON YOUR HEALTH.

#### 2. Before getting into the vehicle, check:

- the general condition of your vehicle, visually (as per handbook),
- tyre condition, tyre pressures (including spare wheel), and the absence of any foreign body between the twin wheels,
- cleanliness of windows, windscreen, rear view mirrors, headlights and other lights, number plates,
- operation of regulatory and optional lighting systems,
- correct coupling of trailer or semi-trailer (hook, brake hoses, colour coding, electrical connector, etc),
- presence and contents of the on-board tool kit,
- in winter, the presence of snow chains and that they are securely fastened.
- that vehicles equipped with side guard panels and beams are permanently provided with this equipment. When removing/refitting, ensure that the locks are correctly locked and tighten the screws moderately.

#### 3. On board

- Check the condition of the non-slip foot pedal covers.
- Ensure that the safety controls (steering wheel, foot pedals, gear lever, etc.) are never cleaned with a slippery product (such as silicone).
- Adjust your driving position,
  - steering wheel: ensure the steering column is locked,
  - seat: ensure it is correctly locked in place,
  - rear view mirrors.
  - seat belt: it is mandatory to wear this; use it,
  - child(ren) on board: comply with the legislation in force.
- Before starting, check:
  - that the gear selector lever is in the Neutral position
- Check that all instrument panel indications are normal (if in doubt, refer to this driver's handbook).

### Digital tachograph

Check that the driver's card is in tachograph slot 1.
 For a second driver, check that his card is in tachograph slot 2.
 Check that the tachograph is working properly.

#### 4. When on the road

- If you notice anything abnormal in the vehicle's operation, stop and find the reason.
   Do not set off again unless you are certain that it represents no serious technical or safety-related threat.
- When driving, the use of some of the standard, optional or added equipment is strictly forbidden (hand-operated sun-roof or hatch, television,on-board telephone,

CB, etc.) or is permitted only if you take all the precautions necessary for road safety (cigar lighter, radio manual search function, etc.).

- Adapt your driving style to suit your load (banking or bend, high centre of gravity, etc.), taking account of weather conditions and the time of day.
   If necessary, adjust the headlight beam levels.
- Never shut down the engine when the vehicle is moving (this will cut off the power steering and could reduce braking effectiveness).

#### 5. When parking the vehicle

- Check that the vehicle is correctly parked (so that it does not obstruct traffic flow or threaten the safety of neighbouring installations).
- If the vehicle is going to remain stationary for some time, use one or more wheel chocks to prevent it from moving (semi-trailer compressed air leakage, black ice, etc.).
- Check that:
  - the parking brake is locked and holds the complete vehicle still (test position),
  - the gear selector lever is in the Neutral position.
  - the battery disconnect switch is switched off, depending on vehicle equipment,
  - the air vents are not blocked (independent heating).
- Do not leave in the cab:
  - important documents (personal documents, vehicle documents, documents related to the load),
  - unattended animals.

## 6. Moving away uphill

 To prevent the vehicle from rolling backwards when moving away on hills, it is recommended to apply the parking brake.

#### 7. When repairing or servicing the vehicle



Prior to carrying out any work on the electronic air suspension (other than calibration), place axle stands under the chassis.

- Check the tightness of the wheel nuts according to recommendations.
- Before tilting the cab:
  - ensure that there is enough space at the front of the vehicle,
  - ensure that the parking brake is applied.
  - cordon off a safety perimeter around the cab and ensure that nobody enters this or parks inside it during cab tilt manoeuvres, or while the cab is tilted,
  - stop the engine,
  - put the gear selector lever is in the Neutral position,

21DJ002535

- ensure that nothing will fall on the windscreen,
- close the doors.
- fully tilt the bull-bar if fitted on the vehicle,
- open the bonnet/the radiator grille,
- tilt the cab completely. If partly tilted, chock in place.
- With the engine running:
  - do not go near any moving parts (fan, drive belts, etc.),
  - never disconnect the electrical power (stop the engine first).
- Diesel fuel is flammable: if the fuel filler cap is open, do not smoke, avoid naked flames, and do not use your mobile phone in the vicinity.
- Batteries are filled with acids (risk of serious injury); handle them with care.
- If using an external starting aid:
  - use suitable cables,
  - respect polarities.
- When changing a fuse, replace it with another fuse of the same rating.
- Additional power lines should only be installed by specialists.
- The installation of additional air lines requires a technical study carried out or approved by the manufacturer.
- It is strictly forbidden to heat polyamide hoses (brake circuit pipes).
- Raising the vehicle with a jack: chock the wheels prior to jacking.
- Immobilising the vehicle: use one or more wheel chocks as necessary.
- Wheels and tyres:
  - never check the pressure or inflate/deflate a tyre when hot,
  - never face the wheel when checking the pressure or inflating,
  - when fitting, it is particularly important to ensure that wheels fitted with rim clamps are centred (on Trilex wheels, position the rim clamp at the join of the segments),
- Roadside repairs: collect all fluids that have been drained (oil, fuel, coolant, etc.).
- To help protect the environment, comply with the legislation in force (recovery of oil, anti-freeze and cartridges).

When draining oil (engine, gearbox, drive axles), there is a risk of burns (hot oil).

When draining coolant, there is a risk of burns (hot fluid).

- Parking heater: use motor vehicle diesel fuel only.
- If anti-skid chains are used, the rear wings should be removed, road speed should be reduced and chain tension should be tested at regular intervals.

Any modification, especially to circuits (electrical, electronic or compressed air), can have serious consequences. Such work should only be undertaken with the agreement of the

manufacturer. RENAULT TRUCKS declines any responsibility in the event of a non-compliant assembly.

Only genuine RENAULT TRUCKS parts and circuits defined by the manufacturer guarantee quality, safety and reliability.

By observing the above instructions, you will be using your vehicle in the best possible way. However, you must also carefully read the driving handbook and consult the RENAULT TRUCKS network whenever you need any further information.

We remind you that application of the contractual warranty by RENAULT TRUCKS is subject, among other things, to proof by the customer that servicing and maintenance of the vehicle have been carried out according to our recommendations (frequency, operations to be performed, quality of expendable and consumable products guaranteed by genuine certified or recommended spare parts, quality and training of repair mechanics and use of specific tools, etc.). Compliance with these recommendations will also guarantee the long-term reliability of the vehicle.

Servicing and maintenance performed by the RENAULT TRUCKS network will guarantee compliance with these recommendations. If these operations are performed outside our network, the customer must provide formal proof that our recommendations have been observed.

For all maintenance operations, consult a RENAULT TRUCKS garage.

# Privacy notice for vehicle data

When you drive a product build by our company, some of the data generated by the vehicle (fuel consumption, road profile, vehicle use profile) could be processed. Such data may include personal data and are processed to develop and offer innovative products and services. We would like you to be fully informed about how we may process that information, as well as your rights. We shall always be transparent about what data are collected, how they are utilized, with whom they are shared, and whom to contact in case of any concerns. Renault Trucks policies are compliant with regulation about personal data protection.

If you would like to know more about Renault Trucks personal data protection policy, please visit the web site – https://www.renault-trucks.co.uk

# Open Source Software

Your Renault Trucks vehicle contains various software programs. Some of those programs are open source software, which among other things means that you may have the right to gain access to the source code. This depends on the license terms for the respective software, as agreed between Renault Trucks with its affiliated companies and the respective licensors.

For further information about Renault Trucks' use of open source software and about where you can get access to the relevant source code, as well as the applicable copyright notices and developer credits, license terms and legal disclaimers, please visit https://corporate.renault-trucks.com/en/opensource/.

21DJ002535

# **Statements of Compliance**

### Radio-electronic equipment in the vehicle

The following statement applies to all radio-controlled vehicle components, information systems and communication devices integrated into the vehicle:

vehicle components operated by low and radio frequencies that are standard on the RENAULT TRUCKS range comply with the essential requirements and other corresponding paragraphs of the **RED 2014/53/EU**.

The vehicle's radio equipment is CE marked and follows the following radio frequency settings:

- 7777 (key remote control): frequency 433.92MHz; output power: 14dBm.
- 1048 (Keyless lock remote control): frequency 433.92MHz (receiver only).

### Declaration of simplified compliance for the radio

Aptiv Services Deutschland GmbH, 42367 Wuppertal, declares that the radio equipment linked to this vehicle works according to Directive 2014/53/EU.

The complete compliance declaration text is available at the following internet address: https://www.aptiv.com/automotive-homologation

### Certification of the radio

Frequency bands and output power levels			
Application	Frequency	Maximum power output	
AM	153-279 kHz, 522-1611 kHz	-	
FM	87.5-108 MHz	-	
DAB	174.928-239.200 MHz	-	
Bluetooth	2402-2480 MHz	9.5 dBm (9 mW)	

# Electromagnetic compatibility

The electromagnetic compatibility of the vehicle's components has been tested and approved in compliance with the **ECE-R 10** currently in effect.

# Warnings

In this document, the safety instructions are represented as follows:



SAFETY POINT REQUIRING SYSTEMATIC INSPECTION BEFORE PUTTING THE VEHICLE BACK ON THE ROAD. FAILURE TO COMPLY WITH THE PROCEDURE DESCRIBED RISKS CAUSING SERIOUS INJURY OR EVEN DEATH.



Draws attention to special and important points, procedures or regulations in force that must be complied with.

WARNING! Any different or inappropriate working method risks causing bodily injury to persons and/or damage to products.



NOTE! Draws attention to particular or important points of the method.

21DJ002535



Locking and Alarm

# Locking

Your vehicle is fitted with a central locking system. From the driver's side lock, you can lock or unlock the driver's and passenger's doors at the same time, or you may prefer to manage the locking system using the buttons on the remote control.

# **Keys**

Write down here your remote control and key codes:

- Ignition:
- Doors:
- Remote control:

These numbers are essential for ordering a replacement set of keys in the event that your keys are lost, stolen or broken.

# Flip key fob

# **Opening**

Press button (1) to release the key blade (2).

# Closing

Press button (1) and fold key blade (2) back until it locks.





# **Doors**

# Opening from the outside

Unlocking using a key in the lock (1).

Pull handle (2) upwards and pull the door.





Opening the door actuates the foot board lighting and the overhead light.

# Closing

Push the door until it engages automatically.

Lock using a key in lock (1).

# Opening from the inside

# Unlocking:

Pull handle (3) upwards and push the door.

Press remote control button (6).

Press dashboard switch to unlock the two doors.





When the door is open, handle (3) tilted downwards, the door unlocks automatically on closing.

# Closing:

Pull the door until it engages.

# Locking:

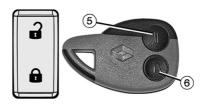
With the door closed, tilt handle (3) downwards.

21DJ002535

### Central locking from the inside:

#### Central locking is done:

- manually, by tilting handle (3) downwards,
- via the remote control, by pressing button (5),
- via the switch on the dashboard.





When the doors are locked, press and hold switch for more than 5 seconds to switch from mode to unsynchronized mode and vice versa.

### Synchronized mode:

- Simultaneous opening of doors by pressing remote control button (6) once.

#### Unsynchronized mode:

- Opening of the door on the driver's side by pressing remote control button (6) once.
- Opening of the door on the passenger side by pressing remote control button (6) a second time.

Simultaneous closing of doors by pressing remote control button (5) once.

# Unsynchronized mode

Opening with the key:

- turn the key once to unlock the driver or passenger door,
- turn the key twice in less than 3 seconds to unlock both doors.

Simultaneous closing of doors by turning the key once.

#### With the remote control

When pressing locking button (5), the steering indicator tell-tale and the hazard warning lights tell-tale flash four times.

When pressing unlocking button (6), they flash once.



# Radio frequency door remote control

This device performs the same functions as the door keys. The doors can be locked or unlocked either by the keys or the remote control.

#### Use

The remote control is battery-powered (CR 2032-3V) which should be replaced when the remote control range is reduced.



When the door is open, central locking is neutralised.

## Unlocking the doors and powering up the vehicle

Press button (6). This action, indicated by lighting of the direction indicators, activates:

- the powering up of the vehicle,
- the deactivation of the engine immobilizer,
- the unlocking of the doors.

### Locking the doors only

Press button (5). This action, indicated by direction indicators lighting four times, activates door closing. The vehicle remains powered and the engine immobilizer is deactivated.

# Powering down the vehicle

Pressing button (5) a second time less than 10 minutes after the first press, indicated by a long flash of 1.5 seconds, causes:

- the activation of the engine immobilizer.



If the direction indicators flash up more than four times (after replacing the batteries, for example), during the flashing, press one of the buttons twice to reactivate the remote control.

If, during a locking command, the flashing lights do not illuminate (despite them operating normally), this means:

- that at least one of the doors is not closed properly,
- that there is a door locking actuator fault,
- that there is a receiver fault

# Interior and foot board lighting

The vehicle is equipped with two overhead lights and two lamps for the foot board lighting.

21DJ002535

The illumination of these lamps is linked to the opening and closing of the doors, the locking and unlocking of the vehicle and finally to the position of the key in the ignition switch.

- When unlocking the doors via the remote control, the lamps illuminate for a period of 17 seconds.
- When opening a door, the lamps illuminate or stay illuminated, if they were already lit, for a period of 5 minutes (if at least one door remains open beyond this limit).
- After closing a door, the lamps remain illuminated for 17 seconds, the time required to position the key in the ignition.
- Switching on the ignition extinguishes the lamps immediately.
- Stopping the engine activates illumination of the lamps for a period of 17 seconds.
- Locking the doors causes the lamps to be extinguished immediately.

The illumination or extinguishing of the overhead lights can be forced by their respective switches.

See Comfort section.

# Replacing the battery

Using a flat screwdriver (1), open the casing at the place marked.

Replace battery (2) respecting the polarity marked on the cover.

Use an alkaline-type battery: CR 2032-3V.

The battery life is approximately 3 years.



Risk of explosion if the battery is replaced by an incorrect type of battery or if the polarity is not respected.

Dispose of the used battery in a site intended for this purpose.







Do not forget to record your key code. If lost, or if you require another set of keys or remote controls, please contact a RENAULT TRUCKS garage. Provide them with the key codes and vehicle paperwork.



Vehicle exterior

#### Vehicle access

How you access the vehicle is important to ensure your safety.

Whether you are accessing your driving position, equipment, or windshield, always apply these simple rules:

- When getting in or out, always face the vehicle.
- One hand, two feet... One foot, two hands... Always keep at least three supports on the vehicle.
- Watch where you put your feet and hands.
- Take the time to secure a support before putting your weight on it. Surfaces can be slippery!

# Cab access

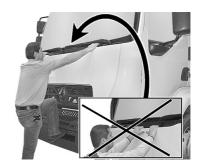
- Up
   Use all the steps and grab handles provided for this purpose.
- Down
   Use all the steps and grab handles provided for this purpose.

Never jump out of the vehicle.



# Windscreen access

With the radiator grille shut and the windscreen wiper control in the "OFF" position, use the foot board and the grab handles to access the windscreen.



#### Front access

Raising your vehicle's radiator grille will give you access to important parts, such as the wiper linkage or the expansion tank.

# Radiator grille

Pull on the lower section of the radiator grille to open it. Push it back to close it.



WHEN WORKING ON THE FRONT END OF THE VEHICLE, WITH THE RADIATOR GRILLE OPEN, ENSURE THAT THE WINDSCREEN WIPER CONTROL IS IN THE OFF POSITION. INDEED, IT MAY BE DANGEROUS TO PLACE YOUR HANDS ON THE WINDSCREEN WIPER LINKAGES. IF POSSIBLE, SWITCH OFF THE MASTER SWITCH.



### Fuel tank

DON'T FORGET to ensure maximum cleanliness when handling diesel.

Make sure that the tank is properly filled to avoid condensation from forming. But do not overfill it either to avoid fuel spilling on the roadway.

When refuelling, you must always make sure that the area around the filling inlet and the cap is clean. Make sure to filter the fuel from your own tank or drum and check that all the containers are clean.

#### Filler cap

The cap is locked by means of a lock (1).





To avoid moving off without refitting the cap on the tank, the key cannot be withdrawn while the cap is removed.



Use only commercially available diesel for motor vehicles (Standard EN 590).



SWITCH OFF THE PARKING HEATER BEFORE FILLING THE TANK(S).

# **Fuel labels**

Modern engines are very sensitive to the quality of the fuel used. To guarantee optimum operation and the best possible cleaning of exhaust gases, the legislators have decided to impose a clear and precise code on fuel manufacturers and distributors, details are given in this chapter.

# Label read mode

# Fuel compatibility labels



Before filling your vehicle with fuel, please refer to the label affixed to the vehicle fuel tank(s). This label indicates which types of fuel are compatible with your vehicle.

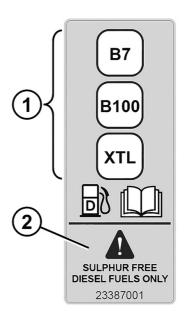
On your vehicle fuel tank(s), a label like the one shown below indicates which types of fuel are compatible with your vehicle, based on the certificate level of your vehicle.

The logos (1) represented on the label are the logos that you will find on the fuel pumps at a service station.

Please refer to the table for more details about the meaning of each logo.



The note (2) informs you that only fuels that contain less than 10 ppm of sulphur are permitted.



# Meaning of the logos shown on the labels

The table below gives the meaning of each of the current logos.

LOGO	Relevant standard	Indicates that your vehicle is compatible with
В7	EN-590	Fuels that contain up to 7% Bio-diesel (Standard diesel in Europe)

B10	EN-16734	Fuels that contain up to 10% Bio-diesel
B20	EN-16709	Fuels that contain from 14 to 20% Bio-diesel
B30	EN-16709	Fuels that contain from 24 to 30% Bio-diesel
B100	EN-14214	Fuels that contain up to 100% Bio-diesel (See <b>Caution*</b> below)
XTL	EN-15940	Paraffinic fuels obtained by synthesis or hydro-treatment (example: HVO, GTL, etc.)



\*If the B100 logo is shown on the label, your vehicle is compatible with fuels type B7, B10, B20, B30 and B100, on the strict condition that they comply with the standards mentioned.



All the fuels can be used on their own. Fuels type B7, B10 and XTL are fully interchangeable. If you regularly or occasionally use B20, B30 or B100, please contact a RENAULT TRUCKS Service Point for details of fuel change methods and maintenance intervals.

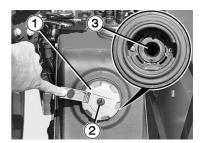
# AdBlue tank(s)

The use of an additive for post-treatment of exhaust gases is mandatory to meet antipollution standards. It is forbidden by law to drive without AdBlue and it can cause irreversible damage to your engine.

Blue-coloured filler cap (1).

The cap is locked by means of a lock (2).

The tank filler neck is equipped with a fool-proofing device (3) which prevents any incorrect equipment from being inserted, to prevent any product other than AdBlue from being added.





The AdBlue level is displayed on the multifunction information display.



The AdBlue level can be viewed on the multifunction information display in the additional driving information.



When filling the tank, it is essential to insert the fuel pump nozzle fully into the filler opening and to hold it in position to ensure that a sufficient volume of air remains on top of the AdBlue.



Use only commercially available AdBlue for motor vehicles (DIN standard 70070).



When handling AdBlue, use only type-approved containers and pumps that are clean and used only for this purpose.



It is forbidden to replace AdBlue by any other product or add any other product to it or else vehicle pollution control will no longer be achieved and you will run the risk of damaging the post-treatment system.

### **Tanks**

You are recommended to check the AdBlue level in the tank each time the vehicle is filled with fuel.



The use of AdBlue is essential to the correct operation of the vehicle and for abiding by legislation in force.

Not using AdBlue may be considered an offence.



If you note that the AdBlue you are using for your vehicle is contaminated, in no event should you start your vehicle; contact a RENAULT TRUCKS garage.



When draining the AdBlue tank, it is essential to refill it with at least 7 litres of AdBlue to prevent any damage to the after-treatment system.



Do not reuse AdBlue that has been drained from a tank.



AdBlue must always be handled with care; it is a corrosive agent.

AdBlue must never come into contact with other chemical products.

If it is spilled on the vehicle or if there is a leak, wipe off the excess with a cloth and rinse with water.



IF ANY ADBLUE IS SPLASHED ONTO THE SKIN OR INTO THE EYES, RINSE THOROUGHLY WITH WATER.

IN CASE OF INHALATION, BREATHE FRESH AIR.

CONSULT A DOCTOR IF NECESSARY.

## Master switch



When the electrical circuit is open, the air conditioning systems and parking heaters are no longer operational.

Turn the handle (1) a quarter turn to isolate the electrical installation except:

- the central door locking
- the tachograph
- the parking heater time switch
- the hazard warning lights
- the AdBlue pump





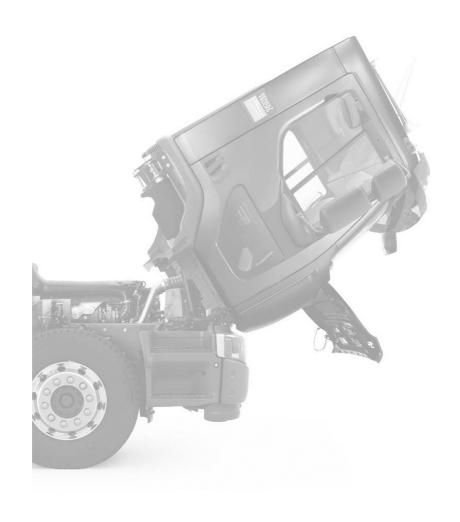
Wait for 10 seconds after switching off the ignition before opening the master switch.



If the vehicle is equipped with an electric door locking remote control with master switch control, refer to the **Locking and alarm** section for details of how to use it.



Wait for 10 seconds after switching off the ignition before opening the master switch.



Cab tilting

# General information on the cab tilting



Never tilt the cab while the engine is running.

Before tilting the cab, check that:

- the ignition is switched off,
- the parking brake is applied,
- the gear selector lever is in the "N" position (neutral),
- the storage compartments are locked.
- no object inside the cab could be thrown towards the windscreen,
- the doors are fully locked,
- the area in front of the vehicle is unobstructed.

When working underneath the cab (on the engine, etc.), the cab must be fully tilted. Do not stand directly in front of the cab when it is tilted.

Any operation on the cab tilt hydraulic circuit requires the application of safety instructions and must therefore be carried out at a RENAULT TRUCKS service point.

The service cover **must** be opened before the cab is tilted in order to avoid damage.



The doors should either be fully open or properly closed.

# Cab tilting

#### Tilt the cab

Open the radiator grille.

Position lever (1) in the "Up" position. Use the control bar (2).

Unlocking is automatic, pump until the cab is tilted completely.



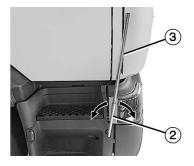
Use jack handle (3) in addition to control bar (2). Insert the jack handle fully.

### Lowering the cab

Use control bar (2) and set lever (1) to "Lower" to lower the cab back into the driving position.

Pump until the cab locks automatically and the pump handle becomes harder to move.

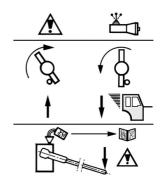
Close the radiator grille.





In the event of difficulty with tilting, put the cab in the "road" position and check the oil level. Top up the level if necessary.

Refer to the Cab tilt hydraulic tilt section.





Never put oil in the hydraulic system when the cab is tilted.

# Cab tilt hydraulic circuit

### Cab tilt hydraulic circuit

#### Filler and level

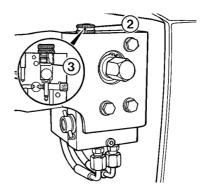
With the cab in the "road" position, fill with oil through oil reservoir filler port (2).

To access the tank, loosen screw (1) and rotate the headlamp insert.

Check the oil level: the oil should be flush with the top of piston (3) when the piston is in the "down" position.

Carefully complete a full tilt manoeuvre (raise and lower) and check the level again. In the event of incorrect operation, visit a RENAULT TRUCKS garage.







Driver environment

#### Seats

Your Renault Trucks vehicle seats can be adjusted to adapt to your body shape and ensure your comfort.



For safety reasons, it is essential to remove the plastic protective film when commissioning the vehicle.

### Pneumatically-controlled seats

The controls are operational when there is sufficient air pressure.

#### Driver and passenger seats



Depending on the seat configuration (driver's, passenger, left-hand drive, right-hand drive), the controls are located on one side or the other of the seat. The type of seat shown is only one solution.



FOR SAFETY REASONS, ALL SEAT ADJUSTMENTS MUST BE MADE WITH THE VEHICLE STATIONARY.

THE USE OF THE SEATS IN A POSITION OTHER THAN BACK REST UP WHILE THE VEHICLE IS BEING DRIVEN IS THE RESPONSIBILITY OF THE USER.

### Backrest tilt adjustment (driver/passenger)

Backrest tilt adjustment and rest position lever (it is forbidden to use this position for driving).



## Seat adjustments

Longitudinal seat adjustment (driver/passenger).



Driver's seat base depth adjustment.



Seat tilt adjustment (driver/passenger).



Seat height adjustment (driver/passenger).



Vertical suspension settings

21DJ002535

# Driving position

Adjust the flexibility of the suspension depending on the condition of the road and the weight of the user.

Softness adjustment of the 'vertical' driver's seat suspension.

At top: suspension firm.

At bottom: suspension soft.

Quick lowering of the suspension (driver's seat)



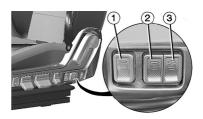


## Driver's backrest comfort settings

Backrest side support adjustment (1).

"Lower" lumbar support adjustment (2).

"Upper" lumbar support adjustment (3).



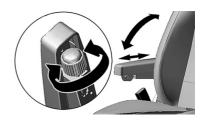
# Driver's seat thermal comfort settings

Heated seat cushion and back rest on the driver's seat (automatic thermostat-regulated operation).



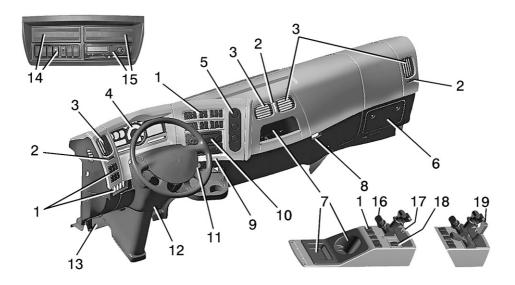
# Armrest adjustment

Adjustment of the corresponding arm rest angle.



### **Dashboard**

get familiar with the dashboard of your Renault Trucks vehicle. So you will know exactly how to optimise your comfort, and how to use each function.



#### Depending on your vehicle's equipment

- 1 Switches
- 2 Ventilation hatch control
- 3 Ventilation hatch
- 4 Instrument panel
- 5 Heater setting panel
- 6 Fuses
- 7 Storage compartments
- 8 24 V socket (360 W max.)
- 9 12 V socket (120 W max.)
- 10 Modular space (radio)
- 11 Cigarette lighter
- 12 Steering wheel adjustment control

- 13 Diagnostic socket
- 13 Infomax socket
- 14 Switches / modular space
- 15 Modular space (tachograph)
- 16 Parking brake control
- 17 Socket for air gun
- 18 Static trailer brake
- 19 Trailer brake

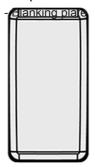
# Key to switches

#### General

Switches that may be fitted in your truck are shown on the following pages.

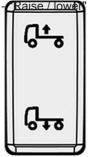
The switches that are available in your particular truck depend on the truck's equipment and may therefore deviate from the table below.

### Dashboard (side location)



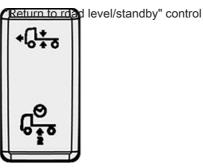


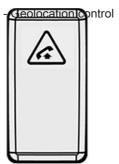
articulate riper regeneration control (Euro VI)

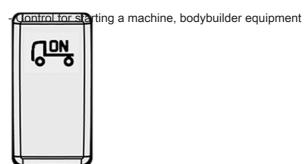


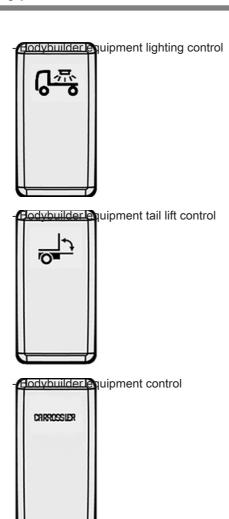
Raise / lowen suspension control



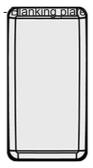






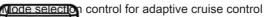


# Dashboard (central location)

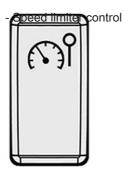






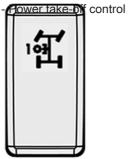














- Corfee for activating drive mode for difficult terrain



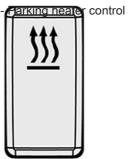
# Header shelf







# Console on engine tunnel





# Double locking switches

Some functions use double locking switches requiring them to be unlocked for both activation and deactivation.

#### Use

Activating the function:

 push lock (1) upwards and press part A of the switch.

#### Deactivating the function:

 push lock (1) upwards and press part B of the switch.





Failure to comply with this procedure will cause damage to the switch.

# Combined lights and horn stalk switch

#### **Direction indicator**

Operate the control parallel to the steering wheel.

Position (1): RH direction indicator.

Position (2): LH direction indicator.

The control returns automatically.





The warning lights associated with the direction indicator tell you about the status of the system (refer to **instrument panel** section).

## Warning buzzer

Press the end of the control.

## Warning light

Press the control towards you. Warning pictogram (9) lights up.



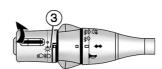
## Daytime running lights (DRL)

The daytime running lights illuminate automatically when the ignition is switched on.

The daytime running lights go out automatically as soon as the parking lights illuminate.

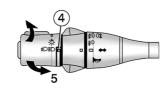
## Parking lights (position lights)

Turn the control to position (3).



## Dipped beam headlights (low beam)

Turn the control to position (4).



## Main beam headlights (high beam)

With the control in position (4), move the control towards you (5). Warning pictogram (9) lights up.

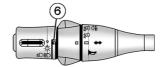
To return to the dipped beam headlights position, move the control towards you again (5).

The instrument panel is lit in all "Lights" positions.



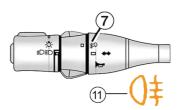
#### **Extinguishing**

The control should be in position (6).



#### Fog lights

In dipped beam headlights position, turn the ring to position (7). Warning pictogram (11) lights up.



#### Audible alarm

When a front door is opened, an audible alarm is triggered to warn you that the lights are still lit while the ignition has been switched off (discharging of the accumulator batteries).



If the dipped beam headlights warning pictogram is not displayed, check the operation of the dipped beam headlights; if necessary, replace any defective bulbs (refer to the **Servicing and Maintenance** section).

If the cause of the fault is not the bulbs, visit a RENAULT TRUCKS garage.

# Windscreen wash/wipe control

# Driving position

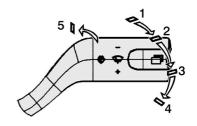
Operate the control parallel to the steering wheel.

Position (1): park.

Position (2): intermittent wiping.

Position (3): slow wiping.

Position (4): fast wiping.



### Wiping 2 sweeps:

Lift the control to position (5), allow it to return on its own and the windscreen wiper will quickly perform two return sweeps.

Keeping the control in position, activate the windscreen wiper and the windscreen wash at the same time.

When you stop pressing on the control, windscreen wiper operation cuts off after a few sweeps.

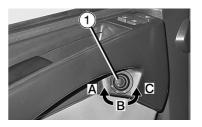
#### **Door mirrors**

Your mirrors must be adjusted correctly to be able to drive safely.

# **Electrically-controlled door mirrors**

With the master switch engaged, position control (1):

- on A to adjust the left rear-view mirror,
- on C to adjust the right rear-view mirror,
- on **B** to make it inactive.



## Adjustment

Select the door mirror to adjust then operate the control (1). This is omnidirectional.

# De-icing door mirrors

# De-icing

De-icing is carried out using switch (2).

The rear-view mirrors are de-iced continuously.



Warning icon (3) appears on the multifunction display during the de-icing function



## Forward view mirror

Forward view mirror (1) provides a panoramic view of the front of the vehicle from the driver's seat.



# Steering wheel adjustment

# Driving position

Press control (1).

This control is time-controlled.

Pull, raise, lower or push the steering wheel depending on the position required.

Raise control (1) or wait for the time to expire.





Control (1) is operational when the air pressure in the circuit is sufficient.

## Instrument panel

All the information required during driving is compiled in the instruments.

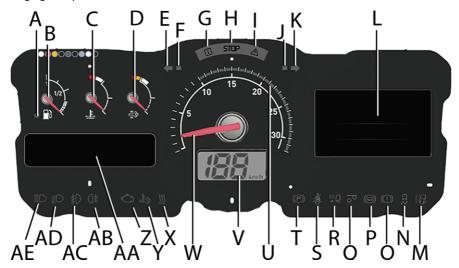
The central part houses the indicators, the information, warning and stop lights, the tachometer and speedometer.

The left-hand display particularly comprises the gauges for fuel level, temperature and exhaust gas filtering system clogging.

The right-hand display shows the information and warning messages when necessary; in other cases, it displays the information of your choice.

Finally, the status warning lights are in the lower part.

You will find a description of the instrument panel in the following pages, with all the warning light captions.



- A Minimum fuel level warning light
- Fuel level indicator
- C Engine cooling circuit temperature indicator
- D Particulate filter clogging indicator
- E Rigid unit LH direction indicator lights telltale
- F\*\* Trailer LH direction indicator lights warning light
- G "INFORMATION" warning light indicating that a new message has appeared on the multifunction information display

- H "STOP" warning light: stop immediately
- I "SERVICE" warning light: go to the nearest RENAULT TRUCKS garage
- J\*\* Trailer RH direction indicator lights warning light
- K Rigid unit RH direction indicator lights telltale
- Multifunction information display
- M Lane Departure Warning System "Alert" warning pictogram
  - Lane Departure Warning System deactivated "Information" warning pictogram
- N "ESC", "ASR", "DTC" operation warning light
- O Braking system fault warning pictogram
- P Trailer braking system fault warning pictogram
- Q Lift-up axle warning light
- R Collision risk "Alert" warning pictogram
  - AEBS deactivated "Information" pictogram
- S Fasten seat belt warning light
- T Parking brake warning light
- U Engine operating speed zone
- V Speedometer
- W Engine speed counter
- X Parking heater operation warning light
- Y Regeneration in progress warning pictogram
- Pollution control system fault warning pictogram
- AA Comfort information display:
  - Clock
  - Exterior temperature indicator
  - Radio
- AB Fog light(s) warning light
- AC Fog driving lights warning light
- AD Dipped beam headlights warning light
- AE Full beam warning light

#### Operation of direction indicator lights repeater lights

\*Without trailer

When the direction indicator lights or hazard warning lights control is activated, indicator (E) or (K) should flash and the audible warning should sound. If indicator (E) or (K) does not work, one of the vehicle lamps is faulty.

\*\*With trailer

When the direction indicator lights or hazard warning lights control is activated, indicators (E - F) or (K - J) should flash and the audible warning should sound.

If indicator (E) or (K) does not work, one of the vehicle lamps is faulty.

If indicator (F) or (J) does not work, one of the trailer lamps is faulty.



If the cause of the fault is not the bulbs, visit a RENAULT TRUCKS garage.

# The main pictograms

Depending on your vehicle's equipment

Below are the main pictograms that your vehicle uses to give you information.

They appear on the display and are usually shown alongside text explaining the situation.

Please contact your Renault Trucks dealer for further information.



A text indicating the procedure to be followed or an information message is displayed above the warning light.



- Driver's information warning light
- Service early warning indicator



- Faults present "Information" warning light



- Maintenance not active indicator



- Maintenance alert warning pictogram



- Active maintenance not initialized indicator



- Maintenance due date reached or exceeded indicator



- Information display fault warning light



- Battery warning pictogram

- Battery charge fault warning pictogram



- Engine oil pressure "Warning" light



- Engine oil temperature "Alert" warning light



- Engine oil level "Alert" warning light



- Engine oil level "OK" indicator



- Engine oil level information loss warning pictogram



- Vehicle electronic fault warning light
- Body builder unit fault warning light



- Bodybuilder CAN bus link fault warning pictogram



- Unknown electronic box fault warning light



- Parking brake warning light



- Parking brake off warning light on door opening or when switching on the ignition



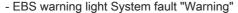
- "ABS" warning light System fault "Warning"



- "ABS" trailer warning pictogram: checking of the device



- Minimum air pressure "Alert" warning pictogram





- Trailer "ABS/EBS" warning light: System fault "Warning"



- "ESC" warning pictogram: System fault "Warning"



- "ESC" deactivated warning pictogram



- "ASR" deactivated warning pictogram



- "ASR" off-road warning pictogram



- Brake test indicator



- Brake distribution incorrect "Alert" warning light



- Brake pad wear warning indicator



- Brakes high temperature warning light



- Air management fault warning pictogram



- Water-in-fuel warning pictogram



- Fuel supply fault warning pictogram
- Clogging detection fault warning pictogram



- Fuel bleed in progress indicator



- Minimum AdBlue level warning light
- AdBlue tank empty warning indicator
- AdBlue valve fault warning pictogram



- Particulate filter regeneration warning pictogram



- Pollution control system fault warning pictogram



- AEBS system fault warning pictogram



- LDWS system fault warning pictogram



- Camera fault warning for AEBS or LDWS



- Engine coolant low level warning indicator
- Engine coolant low level sensor fault warning pictogram



- Engine cooling circuit temperature "Alert" warning lamp



Air filter clogging tell-tale



- Electronic starter fault warning pictogram



- Electronic immobilizer fault warning pictogram



- Engine overspeed warning pictogram
- Engine stop on chassis warning pictogram



- Engine electronic fault warning light
- Air preheater "Alert" warning light
- Fuel reheating "Alert" warning light
- Coolant fan "Alert" warning light



- Electronic air suspension "Information" pictogram



- Electronic air suspension "Warning" pictogram



Adjust suspension height in driving position "Information" warning pictogram



- Retarder fault warning pictogram



- Manual acceleration control for difficult terrain indicator light



- Hill-start assist in service warning pictogram



- Lighting fault warning pictogram



 Gearbox-driven power take-offs in service warning pictogram Marks (1-2-3) are displayed according to which power take-offs are engaged



- Inter-wheel differential lock in service warning pictogram



- Parking heater programming pictogram



- Alarm clock programming warning pictogram



- Rear view mirror de-icing warning pictogram

## Gearbox pictograms



- Information pictogram: move gear lever to position (N)



- Information pictogram: move gear lever to position (D)



Information pictogram: use the brakes or retarders



- "Driving on difficult terrain" activated pictogram



- "Automatic neutral" function telltale

- Risk of clutch wear in reverse gear telltale



- Gearbox oil temperature "Alert" warning light



- Worn clutch warning pictogram



- Clutch overheating warning pictogram



- Power take-off minimum speed warning light



- Power take-off maximum speed warning light



- Gear engaged in direction opposite to driving "Alert" warning light



- Gear engaged in direction opposite to driving "Alert" warning light

## Tachograph pictograms



- Tachograph fault warning pictogram
- Driving information pictogram



- Current driving time indication pictogram



- Accumulated driving time indication pictogram



- Rest time indication indicator



- Accumulated rest time indication indicator



- Working time indication pictogram



- Availability time indication pictogram

# Information pictograms for bodybuilder equipment

Depending on your vehicle's equipment



- Body interior lighting pictogram



- Bodybuilder system unlocked warning pictogram



- Bodybuilder system active pictogram



- Reverse prohibited warning tell-tale



- Bodybuilder system in working position pictogram

# Warning messages

If the vehicle needs to display a message or if a fault is detected, one or more warning lights will come on the multifunction display while a window appears on the screen at the same time.

Depending on the importance of the message:

- The "Information" warning light (1) will come on when the vehicle needs to provide information about its operation.
- The "STOP" warning light (2) will come on in the event of a major fault. Stop the vehicle immediately and contact your nearest RENAULT TRUCKS garage. A fault associated with the "STOP" indicator can only be recorded temporarily.



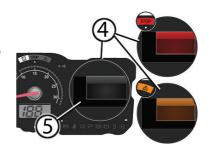
21DJ002535

# Instrument panel

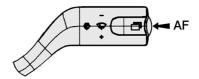
- The "SERVICE" warning light (3) comes on, requiring rapid intervention on your part. If possible, you should identify and resolve the problem, or seek assistance at your nearest RENAULT TRUCKS garage.

These lights will often come alongside a colour-coded information pop-up on the screen (4).

An icon may provide a specific indication of the nature of the message in (5)



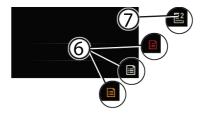
You can log messages by pressing the AF control or the EXIT key (1) on the remote control.





An icon (6) will be shown as a reminder when a fault is logged. The icon colour will depend on the level of importance of the alert.

If more than one fault has been identified, the number of faults will be shown on the icon (7).



# Use of the tachograph

The tachograph records the vehicle speed and the drivers' driving and rest time. The drivers, companies and authorities can use the recorded information to check that the rules are being followed.



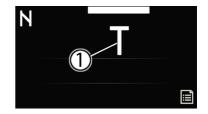
To prevent damage to the tachograph, carefully read manufacturer's user guide supplied with your vehicle's on-board documents

The vehicle is equipped with a digital tachograph where the driving and rest times are recorded digitally on the driver's card.

## Ignition on

The appearance of an icon (1) and its associated message may occur if the driver card is missing from the reader or if the tachograph drawer is not closed.

If the icon (1) and its associated message do not disappear after inserting the driver card or closing the drawer, please visit your nearest RENAULT TRUCKS garage as soon as possible to arrange for a repair.



# Ignition off

If the tachograph printer drawer stays open when switching off the ignition, an audible signal sounds and warning pictogram (1) and its associated message (2) appear on the multifunction information display.

Close the tachograph printer drawer again.

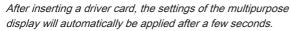


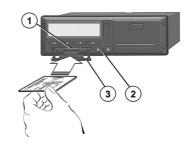
If the vehicle is to be laid up for a prolonged period of time (more than 10 days), disconnect the circuit by removing fuse (**F68 - F98**) to avoid discharging the batteries through the tachograph.

# Tachograph



The vehicle must be stopped and the ignition switched off when inserting or ejecting the driver card into or from tachograph card reader (1). Hold the Driver (2) button for approximately 2 seconds, open the card reader slot (3) and insert or remove the driver card, then close the slot. Ejecting the card will automatically reset the drive and rest time information indicated on the multipurpose display.







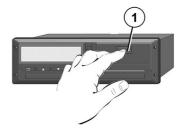
During loading of the driver card data in the tachograph, it is possible to select an activity and to drive.

## Installing a roll of paper



This operation should be performed with the vehicle stationary and the ignition switched off.

Press part (1) to open the printer drawer.



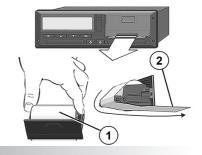


DEPENDING ON THE AMOUNT OF PRINTING CARRIED OUT, THE THERMAL PRINTING HEAD MAY BE VERY HOT AND BURN THE FINGERTIPS.

Open the printer drawer and remove the old paper roll (1).

Place the new paper roll (1) and guide it onto the roller.

Ensure that the end of the paper strip (2) is sticking out of the bottom of the drawer edge (see illustration). Push the printer drawer back in until it locks. The printer is ready to operate.





Only rolls of paper with the following specifications may be used:

- type approval marking "e1 84",
- approval marking "e1 174",
- RENAULT TRUCKS part number: 50 01 867 410.



ENSURE THAT THE PRINTER DRAWER REMAINS CLOSED AT ALL TIMES TO PREVENT ANY RISK OF BEING CUT BY THE PAPER CUTTING BLADE.

# General points about the multifunction display

Located on the right-hand side of your dashboard, the display is an essential vehicle driving aid.

The display (1) allows you to see the status of your truck at any time and make any necessary adjustments, regardless of whether or not its functions are switched on.

Behind the steering wheel on the right, the planet gear (2) and the button at the end of the stalk switch (3) allow you to browse through the menus.

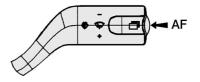


# Description of the multifunction display controls

The function of control (AF) varies depending on where you are in the additional driving information, in one of the menus or submenus.

## Additional driving information

- Each time control (AF) is pressed, the following additional information screen is displayed.
- When a fault or information is displayed in the main display area of the multifunction information display, pressing control (AF) transfers the indicators for active functions or faults present to the reminder area, see Multifunction information display page 75.



#### Menus

Press and hold control (AF) to go directly (without confirmation) to the additional driving information.



If there is no action on the button for approximately 30 seconds, the information display reverts directly (without confirmation) to the additional driving information.

## Radio/information display remote control

The "radio/information display" remote control located under the steering wheel can be used to adjust the radio without releasing the steering wheel. It can also be used for "navigating" through the various menus of the multifunction information display.



IN "INFORMATION DISPLAY" MODE, FOR SAFETY REASONS, IT IS RECOMMENDED TO USE THE REMOTE CONTROL WITH THE VEHICLE STATIONARY AND PARKED CORRECTLY.



#### **Functions**

- Select radio source (FM, AM, USB, AUX), depending on compatible equipment connected to the radio.
- 2. No functions associated with the radio/exit the menu or return to the previous setting (multifunction information display).
- 3. Increase volume (radio)/navigate the menus or adjust settings (multifunction information display).
- 4. No functions associated with the radio/access the menu or sub-menu selected/ confirm
  - settings (multifunction information display).
- Decrease volume (radio)/navigate the menus or adjust settings (multifunction information display).
- 6. **Radio:** Change tuner mode (PRESET, AUTO, MANU) by a brief press / answer and end a phone call.

Media: Go to the next folder.

Bluetooth® telephone: Briefly press to answer or hang up.

Only during a call, press and hold to transfer a call without going through the handsfree mode.

Radio: Scroll through presets in PRESET mode, stations in LIST mode, Bluetooth® or USB tracks, or search for frequencies in AUTO or MANU mode (radio) / scroll through menus (multifunction information display).

Media: Scroll to previous or next tracks on USB or Bluetooth®.

Combined action on buttons 3 and 5 activates the MUTE function in tuner mode, and the MUTE PAUSE function in media mode.

# Multifunction information display

## **Description:**

The multifunction information display is divided into 4 separate zones.

## Area (1)

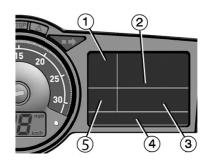
Information relating to the use of the gearbox and retarder.

# Area (2)

This is the main display area; the various menus, additional driving information, air pressure in braking system indicator, warning and information lights are displayed here.

When the ignition is switched on:

- the warning lights relating to the self-test are displayed for a few seconds.
- if the engine is not started immediately, the oil level is displayed.



#### When driving:

When you activate a new function or if a fault occurs on the vehicle, the indicator light representing the function or fault is displayed in area (2).

Pressing the windscreen wiper control button makes it go back to area (3). If the fault is associated with the **"STOP"** indicator, it will reappear after 5 seconds without any action from the driver.



The colour of the display in area (2) will change to attract your attention, depending on the importance of the message:

- For driving or equipment information, the display will use grey and white colours.
- The display will turn orange to indicate important information or a fault requiring your attention.
- The display will light up red if a major fault requires the vehicle to be stopped immediately.

# Area (3)

Gauge display area.

- On the left: AdBlue® tank level,

On the right: air pressure in the brake circuit.

## Area (4)

Reminder area for icons showing active functions or faults present.

The messages displayed in (2) will switch to this area when button (2) on the remote control is pressed.

Some functions will be displayed directly in area (4) without passing via area (2).



The function icons are displayed from left to right, the information icons on the right.

Refer to Fault(s) display section.



When the area (4) is full, only priority indicator icons are displayed.

See chapter **Driving**.

## Area (5)

Not used.

# Additional information on driving in the area (2)

# Tachograph information

# Total driving time (1).

- The cumulative driving time displayed on the instrument panel is the effective vehicle driving time (speed other than 0 km/h).
- Short traffic-related stops are automatically deducted.

## Total rest time (2).

 The cumulative rest time is incremented based on continuous 15-minute periods of rest or availability.

Information on distance travelled (3).





The times displayed are given as examples. Only the data recorded on the driver card or on the disc have legal force.

This information shall be reset when the driver's card is retrieved or when driving or working is resumed after 46 minutes of cumulative rest.



Information about air pressure available in the braking system (4).

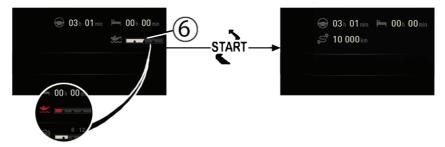


Information on the amount of AdBlue® available in the tank (5).



The oil level is shown in (6) before starting the engine.

If the level is too low, it will appear in red.



Using the control (AF) (please refer to the **Description** chapter), it is possible to display successive information

This information is displayed for a set time when the ignition is switched on, with the engine running or at rest, and when the vehicle is not moving.

Once the vehicle starts moving, if you select an item of information, this will continue to be displayed permanently.

# Instantaneous fuel consumption in litres per 100 km (vehicle moving) or in litres per hour (vehicle static) and partial mileage/kilometres

- The instantaneous fuel consumption is given as a guide only; it can reach high values during acceleration or when starting, but is not significant for the average fuel consumption of the vehicle.
- Distance covered since the last reset.
- Average consumption in litres per 100 km.
  - This information is zero reset using control (AF), by pressing for longer than 3 seconds.





## Engine operating hours counter

- Engine operating hours.
- Engine operating hours (vehicle static).
- Date.

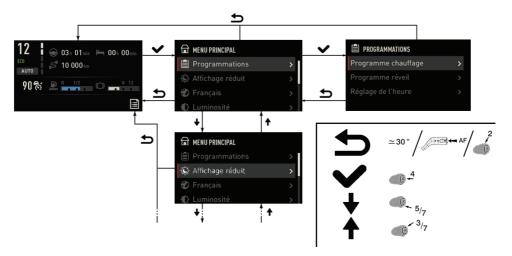


## Adaptive cruise control

- Information related to chosen adaptive cruise control mode:
  - target speed,
  - adaptive cruise control mode is selected,
  - distance between you and the vehicle in front of you,
  - Function on/off



# Menus and submenus



Buttons 1, 2, 3, 4, 5, 6, 7 refer to the steering wheelmounted radio/information display remote control and AF on the button at the end of the windscreen wiper control. See description of the controls at the start of the chapter.



#### Main menu

- Programming. In this menu, you will find sub-menus:
  - 1: Heating program
  - 2: Alarm clock programming
  - 3: Setting the time
- Reduced display
- Selected languages (the display will show this menu in the language that is currently selected). You have a choice of three different languages.

Brightness.

- Sound level adjustment. In this menu, you will find sub-menus:
  - 1: Sound level
  - 2: Info
- Water draining.
- Info reminder.
- Equipment message.
- Experts. In this menu, you will find sub-menus:
  - 1: Self-test
  - 2: Maintenance
  - 3: Diagnostics
  - 4: km/h mph
  - 5: Dynamometer
  - 6: Additional info

For using the various menus, see following page(s).



When driving, only the "reduced display", "brightness" and "sound volume" menus can be accessed.

# Parking heater programming

The parking heater programming is controlled from the display.

- To activate the function, select "parking heater programming" using the steering wheel-mounted remote control.



Use buttons (3) - (5) or the thumbwheel (7) on the remote control to make choices in the menus.

Confirm with button (4).

The choices available are:

Switch the delayed start on or off for the parking heater.



21DJ002535

# Multifunction information display

Select the day when the parking heater is switched on.

Then set the start time for the cabin heater.

Then set the end time for the cabin heater to be activated.

Once you have confirmed your settings, exit the menu by pressing button (2).



Set in steps of 10 minutes with a maximum time of 2 hours.

When programming is complete, pictogram (1) appears on the display.



# Alarm clock programming

The alarm clock programming is controlled from the display.

- To activate the function, select "alarm clock programming" using the steering wheel-mounted remote control

Use buttons (3) - (5) or the thumbwheel (7) on the remote control to make choices in the menus.

Confirm with button (4).

The choices available are:

Activate or deactivate the alarm clock.

Select the day when the alarm clock is activated.

Change the alarm clock hour and minute times.

Once you have confirmed your settings, exit the menu by pressing button (2).

For setting the time, see the next paragraph.



When the alarm clock has been programmed, pictogram (1) illuminates on the multifunction information display.

To stop the alarm, press control (AF) or remote control buttons (4) - (2).

This manoeuvre deactivates the alarm clock function.





The alarm clock must be reactivated each time the alarm has been stopped.

# Setting the time and date

The time programming is controlled from the display. Make sure that the time shown is accurate because some vehicle functions depend on it (registering fault codes, alarm clock function, etc.).

# C - Setting the time on an ADR vehicle

This function is used to set the time on the instrument panel and the date.

# Setting the time and date

#### Setting the time:

- Set the minutes using buttons (3) (5) or the thumbwheel (7) on the remote control. Confirm using button (4) to go to the next setting.
- Set the hours using buttons (3) (5) or the thumbwheel (7) on the remote control. Confirm using button (4).



#### Set the date:

- The date cannot be adjusted on vehicles fitted with a tachograph.

Once you have confirmed your settings, exit the menu by pressing button (2).

# Reduced display

This function reduces the brightness of the multifunction information display for the viewing comfort of the driver.

Only the AdBlue level indicator is present on the multifunction information display (1).

This function appears poorly lit.



If a message or warning is displayed, the information display brightness reverts automatically to the initial setting.



Pressing button (4) on the remote control activates or deactivates the multifunction information display lighting.

Pressing button (AF) on the windscreen wiper control (refer to the **Description** section) takes you directly to the additional driving information.

# Languages selected

This menu is displayed under the name of the currently selected language.

Choose language via remote control buttons (3) - (5) or thumb wheel (7).

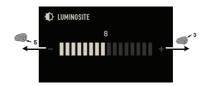
Confirm choice via button (4).

By default, three languages are offered. The choice of languages can be modified at a RENAULT TRUCKS garage.

# **Brightness adjustment**

This function can change the instrument panel brightness.

- Remote control button (3) = increase
- Button (5) = reduce
- Button (4) = confirm





This setting may only be made with the lights lit.



When the lights are lit, the brightness of the instrument panel lighting varies according to the lighting level detected inside the cab by cell (1).



# Sound level adjustment

This menu is divided into two submenus:

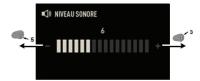
- Audio volume adjustment.
- Activation or deactivation of the display sounds.

# F - Sound level adjustment

#### 1 - Sound level

This function adjusts the volume level.

- Remote control button (3) = increase
- Button (5) = reduce
- Button (4) = confirm



#### 2 - Info

This function or deactivates the beep emitted when receiving information.



Choose **Bip ON or Bip OFF** line via remote control buttons (3) - (5) or thumb wheel (7). Confirm choice via button (4).

# Water draining

This function is used to drain water from the fuel primary filter.

#### Prerequisites:

- Water detected in the fuel primary filter
- Vehicle stationary
- Engine switched off
- Ianition on
- Parking brake applied
- Water draining in progress



If one of these conditions is not met, the message **"UNAUTHORIZED WATER DRAIN"** appears. Check all the conditions and repeat the operation.



After a few seconds, the "Additional driving information" screen display indicates that the water drain has been terminated.

# Information display

#### Info reminder

This function is used to view the active functions and faults present at the time of viewing this menu, by displaying the corresponding pictograms.

# **Equipment message**

This function is used to view the bodybuilder functions that have been initialized.

# **Expert**

This menu is divided into six submenus.

#### 1 - Self-test

This test checks the operation of the instrument panel instruments.

#### 2 - Maintenance

2-1 - Engine drive belt(s)

- 2-2 Air filter
- 2-3 Coolant
- 2-4 Dryer (APM)
- 2-5 Gearbox oil
- 2-6 Engine oil
- 2-7 Brake linings
- 2-8 Last brake change
- 2-9 Alternator brushes
- 2-10 Starter motor brushes
- 2-11 Drive axle oil
- 2-12 Regulatory inspection
- 2-13 Tachograph check
- 2-14 Diesel particulate filter

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).



For more information on interpreting the display, refer to the **Driving** section.

## Resetting the engine oil maintenance interval to zero

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

The interval is reset by pressing button (4) for longer than 10 seconds.

This interval requires the oil to be selected. This selection generates a new interval which will be calculated and modified depending on engine use. The new interval will be displayed after approximately one hundred hours of engine operation.

2-6-1 - Oil grade

2-6-1-1 - RI D-3

2-6-1-2 - RLD-3 MIN

# Resetting a maintenance other than the engine oil

Choose the function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

The interval is reset by pressing button (4) for longer than 10 seconds.

# 3 - Diagnostics

This menu is divided into five submenus.

- 3-1 - Transponder:

21DJ002535

Choose value via remote control buttons (3) - (5) or thumb wheel (7). Confirm by pressing button (4).

- (1): "Code correct": the vehicle can be started.
- (2): "Code incorrect": switch off the ignition and start again.
- (3): "Antiscanning": you have made three consecutive code errors. The system is now locked for 15 minutes. Leave the ignition on and try again after this time.
- 3-2 Faults present
- 3-3 Flashing codes
- 3-4 Part references
- 3-5 Stored faults

## 4 - Km/h - mph

Choose the unit via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).

## 5 - Dynamometer mode

Choose the **Activated or Deactivated** function via remote control buttons (3) - (5) or thumb wheel (7).

Confirm by pressing button (4).



After deactivating the function:

- pictogram (1) and "Information" light (4) illuminate,
- pictogram (2) and associated message (3) are displayed on the multifunction information display informing you that you are in dynamometer mode.



#### 6 - Additional info

This function is used to check:

- battery voltage,
- engine oil pressure,
- average speed.





Some of these submenus are in turn divided into submenus which generally represent each of the ECUs fitted on your vehicle.

21DJ002535



Living

# Living

Your truck offers you other features for improving your comfort. To guarantee your safety, and help your vehicle last a long time, make sure to use these objects as they were designed to be used (socket power rating, etc.).

## Nomad ashtray:

Nomad ashtray (1) must always be stored in one of the locations provided, with the cover closed after use.

Check that this safety requirement has been complied with before driving the vehicle or tilting the cab.



# 12 V/24 V comfort power sockets



Observe the maximum power rating permitted by the in-cab sockets:

- 12V / 10A = 120 W
- 24V / 15A = 360 W





Do not connect adapters to the cigar lighter.



It is strictly prohibited to store flammable materials inside the cab.

#### Installation of accessories

The flat surface of location (1) allows you to install a holder for a device.

Ensure that the bolts do not penetrate the dashboard by more than 10 millimetres.



## Window controls

For your health, be sure to ventilate the interior of the cab frequently.

- (1) Left side window control, driver's side.
- (2) Right side window control, driver's side.
- (3) Right side window control, passenger side.



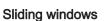
## Use of controls

## Down

Press on the back of the control.

## Up

Press on the front of the control.



## Use of controls:

# **Opening**

Press on the back of control (3).

# Closing

Press on the front of control (3).





## Roof ventilation hatch

For your health, be sure to ventilate the interior of the cab frequently.

## Opening

Push ventilation hatch (1) to the required opening position.

## Closing

Return the ventilation hatch to its initial position.



# Interior storage units

Your Renault Trucks vehicle is fitted with large practical storage spaces in the cab.

# Storage compartment(s)

Assembly fitted with doors.

To open, pull on door handle (1).

To close, push the door until it engages automatically.



# Storage behind cab

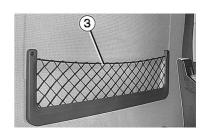
1. Storage compartments.



2. Clothes hanger rail.



3. Glove box with cargo net.



# Cab roof lamp

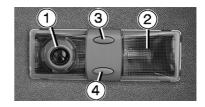
You cab is fitted with roof lamps to ensure optimum lighting inside, even at night.

Switch (3) switches on the adjustable card reader (1).

Each overhead light (2) has a two-position switch (4).

Depending on equipment, the overhead lights work on door opening or automatically (refer to **Locking and Alarm** section).

Switches (3) and (4) are used to switch on the roof lamps when you so desire.



## Cab lighting

When changing a bulb on an overhead light, replace with a bulb of the same output, ensuring you replace the transparent cover.

## **Tablet holder**

This equipment is intended exclusively for the use of applications in line with the transport applications available on the tablet.

Tablet holder (1) is used for installing a 7, 8 or 10-inch tablet with a maximum weight of 715 g.

Depending on the size of your tablet, you may install it in either portrait or landscape orientation.





During driving, this equipment must never be used for viewing movies, videos or other similar applications which could distract your attention and prove to be dangerous.

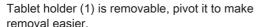
To install the tablet in the holder:

- press buttons (1) simultaneously,
- fold out arm (2) completely,
- install the tablet on the holder,
- press on arm (2) to adjust and secure the tablet to the holder.

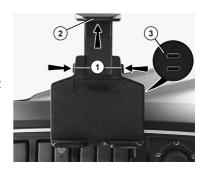
To remove the tablet from the holder:

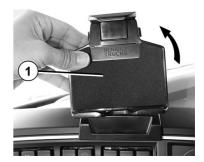
- press buttons (1) simultaneously to unlock arm (2),
- remove the tablet.

USB ports (3) are available behind the tablet holder to connect the tablet to the electrical power supply.



Once removed, the dashboard centre storage compartment may be used as a holder.







The tablet holder includes a magnet. If too close, there is a risk of it interfering with certain electrical devices or magnetic media such as bank cards, USB keys, pacemakers, etc.



RENAULT TRUCKS cannot be held responsible for the incorrect or inappropriate use of this equipment.

In no case can RENAULT TRUCKS be held liable for any damages to the user or third parties in the event of damage to equipment or personal injury associated with or caused by the use of this equipment.

## Safe use of the radio

When you are driving, all your attention should be on the road. Even if the radio is on while you are driving, your attention should still be on the road.

Because of this, you are strongly advised as follows:

- Do not use a mobile phone or similar device while driving.
- Adjust the volume of the audio system so you can still hear noises outside the vehicle.

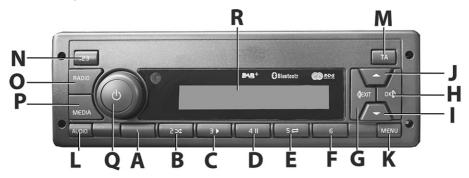
#### Introduction

These instructions will help you to learn and use the main functions of the on-board radio.

The main functions of the audio system are:

- Radio
- USB
- Streaming via Bluetooth®\*
- Auxiliary audio input\*
- Hands-free (with Bluetooth® telephone)
- \*Depending on equipment.

# Reference guide for radio



#### A - Button 1

Radio: briefly press the button to select a station. Radio: hold the button down to save a station.

#### B - Button 2

Radio: briefly press the button to select a station. Radio: hold the button down to save a station.

**Media:** briefly press the button to start shuffle play. Playback is random over the whole medium or the current folder depending on the payback mode selected by button E (repeat folder or repeat off).

#### C - Button 3

Radio: briefly press the button to select a station.
Radio: hold the button down to save a station.
Media: briefly press the button to play a track.

#### D - Button 4

Radio: briefly press the button to select a station. Radio: hold the button down to save a station.

**Media:** briefly press the button to pause the current track.

#### E - Button 5

**Radio:** briefly press the button to select a station. **Radio:** hold the button down to save a station.

Media: briefly press to repeat playback of a track or a folder.

#### F - Button 6

Radio: briefly press the button to select a station. Radio: hold the button down to save a station.

#### G - Exit button

Radio: automatic search.

**Media:** briefly press to select the previous track. Hold down for fast backward.

Bluetooth® telephone: reject an incoming call or hang up.

Menu: go back.

#### H - OK button

Radio: automatic search.

Media: briefly press to select the next track. Hold down for fast forward.

Bluetooth phone<sup>®</sup>: accept an in-coming call.

During call: press and hold to transfer a call to the telephone in hands-free mode.

Menu: confirm the current step or "next setting".

#### I - Search down button

Radio: manual tuning downwards.

**Media:** previous folder. **Menu:** previous menu line.

## J - Search up button

Radio: manual tuning upwards.

Media: next folder Menu: next menu line.

#### K - "MENU" button

Radio: briefly press to enter or exit the menu.

#### L - "AUDIO" button

Open/close audio settings.

#### M - TA: traffic announcements

Radio: enables or disables traffic information messages, rejects current messages.

## N - "123" button

Radio: briefly press the button to go from one preset range to another. The radio has three preset ranges in each of the AM, FM and DAB bands (according to options); (AM1, AM2, AM3 and FM1, FM2 and FM3, DAB1, DAB2 and DAB3)

#### O - "RADIO" button

Radio: to select FM or AM mode.

**Media:** to switch from media mode to tuner mode, then returns to the last station listened to (Band, bank and preset)

#### P - "MEDIA" button

Radio: switches from tuner mode to media mode, selects the last media used (USB, BT streaming, AUX)

Media: switches between the various media available (USB, BT streaming, AUX)

# Q - Thumb wheel/"PWR" power button

Hold the button down to switch the system on or off.

When the radio is on, a brief press activates the mute function (switches off the sound without stopping media playback).

Turn the thumb wheel to adjust the volume.

# R - Display

Radio information is displayed in two different ways:

- on the radio screen;
- on the instrument panel screen.



All information is displayed on the radio, but only information from the current source is displayed on the instrument panel. Menus and audio settings are displayed only on the radio.



WHEN YOU ARE DRIVING, DO NOT TRY TO MODIFY OR VERIFY THE INFORMATION DISPLAYED. KEEP ALL YOUR ATTENTION ON THE ROAD AND THE OTHER ROAD USERS AROUND YOU. BEING DISTRACTED WHEN DRIVING CAN LEAD TO SERIOUS ACCIDENTS THAT CAN RESULT IN SIGNIFICANT MATERIAL DAMAGE, INJURIES AND DEATH. YOU WILL BEAR FULL RESPONSIBILITY FOR ANY INCIDENT OR ACCIDENT CAUSED BY LACK OF ATTENTION. CONSIDER STOPPING TO USE THE RADIO OR REVIEW THE INFORMATION

## Radio/information display remote control

The "radio/information display" remote control located under the steering wheel can be used to adjust the radio without releasing the steering wheel. It can also be used for "navigating" through the various menus of the multifunction information display.





IN "INFORMATION DISPLAY" MODE, FOR SAFETY REASONS, IT IS RECOMMENDED TO USE THE REMOTE CONTROL WITH THE VEHICLE STATIONARY AND PARKED CORRECTLY.

#### **Functions**

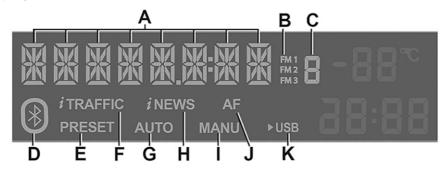
- 1. Select radio source (FM, DAB, AM, USB, BTstr, AUX), depending on compatible equipment connected to the radio.
- 2. No functions connected to the radio.
- 3. Increase volume (radio)/navigate the menus or adjust settings (multifunction information display).
- 4. No functions connected to the radio.
- 5. Decrease volume (radio)/navigate the menus or adjust settings (multifunction information display).
- Radio: Changing the tuner mode (LIST, PRESET, AUTO, MANU).
   Media: Go to the next folder.
  - **Bluetooth®** telephone: During a call, press briefly to pick up or hang up. Only during a call, press and hold to transfer a call without going through the handsfree mode.

21DJ002535

 Radio: Scroll through presets in PRESET mode, stations in LIST mode, Bluetooth® or USB tracks, or search for frequencies in AUTO or MANU mode (radio) / scroll through menus (multifunction information display).

Combined action on buttons 3 and 5 activates the MUTE function in tuner mode, and the MUTE PAUSE function in media mode.

# Display



## A - 8 alpha-numeric characters

Radio: Displays the station current (name or frequency).

**USB:** Displays the track, time elapsed, ID3 information (title, artiste, etc., and/or the name of the MP3 file.

**Bluetooth®**: Displays the time elapsed and the title of the track if they are transmitted by the connected device (depends on the device). Displays BTSTREAM if no information is transmitted.

AUX: Displays AUX.

## B - FM1, FM2 and FM3

Radio: Displays the active FM bank of presets.

## C - Preset number

Radio: Displays the preset number (from 1 to 6).

#### D - Bluetooth®

Bluetooth mode activated. Indicates that a telephone is connected when the symbol is surrounded.

## E - Preset

Radio: Displayed if the Tuner is in Preset mode.

#### F - I-Traffic

Displayed when the function is active, and flashes when a message is transmitted.

#### G - Auto

Radio: Displayed if the Tuner is in Auto.

#### H - I-News

Displayed when the function is active, and flashes when a message is transmitted.

#### I - Manu

Radio: Displayed if the Tuner is in Manual mode

#### J-AF

Displayed if the alternative frequency is activated (RDS)

#### K - USB

Displayed when a USB device is detected

# Starting

#### Menu

Numerous settings are adjusted from the radio menu. You can access the menu by pressing the "MENU" button.

# Language

If AUTO is selected, the radio will use the same language as used for the instrument panel. To change the language, select:

- 1 Press "MENU" button.
- 2 Press the top or bottom button until the current language is highlighted.
- **3** Press "OK" to scroll through the various languages. Select "AUTO" for the radio language to match the language on the instrument panel.
- 4 Now EXIT and the change takes effect immediately.



If the language on the instrument panel is not available for the radio, in AUTO the default language will be English

# Switch on, switch off and mute the sound

Briefly press the POWER button to switch on the radio. Long press (about 1s) to switch off the radio.

Press briefly to MUTE the radio (switches off the radio sound). Press briefly again to set the sound to the same volume as before.



The radio is equipped with a temperature sensor.

In the event of overheating (temperature of above 70°C), there may be a noticeable reduction in performance (reduced bass level, display slowing, etc.).

If a second threshold of above 85°C is reached, the radio will be switched off to protect it from damage.

After the temperature drops, the radio may be switched back on and the original settings will be resumed.

## Use of radio

The radio allows you to listen to the AM/FM stations and record their frequency in the vehicle memory to find them again more easily.

# Select a mode (AM/FM)

#### Radio mode

#### Select an AM/FM radio band

After switching on the radio, press the "RADIO" button to select the source.

The radio automatically switches on to the last source used (FM, AM, or media). If the media source is not available (USB device disconnected, for example), it will activate the previous source.

Use the "RADIO" button to switch between FM and AM.

#### Store a radio station

You can store a maximum of 18 stations for the FM and AM bands, in other words one radio station for each button 1 to 6 in three banks of different presets: no. 1, no. 2 and no.

3. Change the bank of presets by pressing the "123" button.

Please follow these instructions to store a radio station on one of the buttons numbered 1 to 6:

- When the station required is played by the radio, choose the bank of presets required using the 123 button (for example FM1) then hold down one of the buttons 1 to 6.
- An audible beep confirms that the station has been stored.

• Select a stored radio station by briefly pressing the number button.



When switching of the ignition the first time after a radio station has been stored, wait 20 seconds before opening the ADR switch, or the stored station will not be memorized.

#### Search for station

#### Search for a radio station in AUTO

Regardless of the tuner mode (LIST, PRESET, AUTO, MANU) briefly press one of the auto search buttons (arrow to the right or left). When a station is found, the search stops automatically. Repeat the operation to find the station required.

It is also possible to do an AUTO search using the steering-wheel-mounted controls. The tuner should be in AUTO mode (select this mode using the "TUNER" button); move the thumb wheel up or down to start searching. When a station is found, the search stops automatically. Repeat the operation to find the station required.

In List mode, the left-hand and right-hand arrow keys are used for scrolling through the radio stations in the list in alphabetical order or reverse alphabetical order.

In Preset mode, the left-hand and right-hand arrow keys are used for scrolling through the preset ranges 1, 2 and 3.

In Auto mode, the left-hand and right-hand arrow keys are used for searching for the previous/nest station automatically.

# Manual tuning

Regardless of the tuner mode (LIST, PRESET, AUTO, MANU), press and hold the button arrow up or down to find the frequency required.

It is also possible to do a manual search using the steering-wheel-mounted controls. The tuner should be in MANU mode (select this mode using the "TUNER" button); move the thumb wheel up or down to scroll through the frequencies in steps of 0.1 MHz on FM, and 3 kHz on AM.

# Automatic search (LIST mode)

The tuner must be in LIST mode in order to scroll through the stations; turn the steering column-mounted control until the required station is reached or use the left-hand and right-hand arrow keys on the radio. LIST mode enables you to find all available radio stations, classified in alphanumerical order.

#### **RDS**

#### Radio Data System (RDS)

Numerous stations throughout Europe use RDS. The system includes functions such as automatic frequency change (AF) and signals activating traffic announcements (TA) and news.

#### Alternative frequency (AF)

The range of FM station frequencies is fairly limited. For this reason, many radio stations broadcast on alternative frequencies in different sectors.

The AF function has two modes, regional and normal.

- regional mode, for following the regional programme of a broadcasting network; when signal quality degrades, the radio changes transmitter depending on vehicle movements while continuing to broadcast the regional programme
- normal mode: when signal quality degrades, the radio changes transmitter depending on vehicle movements as it searches for the best signal for a broadcasting network
- mode deactivated: when signal quality degrades, the radio does not change transmitter

Press "MENU" and select "AF". The "OK" button you lets you activate or deactivate the function in regional mode (REG), normal mode (ON) or deactivate the function (OFF). Once the required mode is displayed, press EXIT.

When the AF function is active in regional or normal mode, the display shows the AF symbol.

# Traffic announcements (TA)

This function interrupts the current source to broadcast traffic information messages. Note: on FM, not all stations allow their programmes to be interrupted by TA messages.

When traffic announcements are broadcast, you can interrupt them by pressing the "TA" button. This function will remain active. When traffic announcements are not being transmitted, you can activate or deactivate the function by pressing the "TA" button.

The message "TRAFFIC" is displayed when the "TA" option is activated.

#### News

This function interrupts the current source to broadcast information messages.

When the information is transmitted, you can interrupt it by pressing the "TA" button. You can activate or deactivate this function in the "Advanced" menu (Advanced) then "News" (News).

The message "NEWS" is displayed when this option is activated.



When the "TA / News" function is activated, the "AF" function is automatically activated.

#### Important public announcements

Important public announcements can be transmitted on the radio in case of serious events. "ALARM" is displayed when an important announcement is transmitted.

This function cannot be deactivated.

# Programme type(PTY)

Some radio stations broadcast an identification signal at the same time as their programmes, defining the content of their programme as sport, radio drama, financial information or music genre. It is possible to do a station search by programme type. In this case, only stations broadcasting the programme type(s) defined will be selected by the radio.

The message "PTY" is displayed during the search when this option is activated.

You can activate and select one or more areas of interest in the menu using the headings "Advanced" then "PTY". Select "Delete all" to deactivate this function completely. Note: the PTY function is not available on French broadcasting networks.

# Telephone and other Bluetooth® devices

The radio can be paired with mobile phones and other Bluetooth® devices. To connect a device to the radio via Bluetooth®, please proceed as follows:

#### Bluetooth® devices

# Activating Bluetooth® functions

- 1 Activate the Bluetooth® function on the radio and on the device.
- 2 Add the device

#### Activate Bluetooth®

To do this, press the "MENU" button. Select "BT Settings" and "BT ON". When the Bluetooth® function is activated, the Bluetooth® icon is displayed.

# Add a mobile phone or other Bluetooth® device

Add a mobile phone or other Bluetooth® device.

Up to ten different devices can be paired. Press the "MENU" button, select "BT Settings" and "Pairing".

When the radio is searching for Bluetooth® devices, the Bluetooth® icon flashes.

Depending on the type of device, a 4-digit code is displayed on the radio and should be entered on the device (old devices) or 6-digit code appears on both and you should confirm that they are identical (modern devices)



Note: the device's Bluetooth® function should be activated and the device should be detectable and/or searchable. Once the radio and the device are paired and connected, the Bluetooth® icon appears surrounded by a circle (on the instrument panel) or a second Bluetooth® icon appears on the radio.

Several devices can be connected to the radio at the same time. If more than one mobile phone is connected, only one can be used for the "hands-free" function; the other can be used as a source for streaming music.

To change the device for the hands-free function, go to "Menu", "BT Settings", then select the line "Select phone" and choose the telephone required.

To change the device used as a music source, go to "Menu", "BT Settings" then select the line "Audio device" and choose the device required.

Note: the same telephone can be used for both the hands-free function and as a music source.

The peripherals previously connected to the radio reconnect automatically (if the device allows this).

When the radio is switched off, the Bluetooth® function stops and the connection is interrupted. When the radio is switched back on, the devices will reconnect automatically.



If there are already ten paired devices, the message "PHONE LIST COMPLETE" will appear the next time you try to add a device. In this case you will first have to delete a phone.

#### Delete one or more devices

You can delete one or all of the paired devices. To do this, press "MENU", select "BT Settings" then "Remove". Delete one or all of the devices on the list

# Calls with the Bluetooth® hands-free system

# Receive, reject and end a call

- To accept a call, press the "OK" button or use the button on the steering-wheel-mounted controls
- To end a call, press the "EXIT" button or use the button on the steering-wheel-mounted controls.
- To reject an incoming call, press the "EXIT" button.

To resume communication on the phone during a hands-free call, long press on "OK" or the button on the steering-wheel-mounted controls.

# Outgoing call

You can make a call in hands-free mode via the call history or the list of contacts.

To do this, go to "MENU", "Contacts" or "call history" and scroll through the list. To dial a number, do this directly on your mobile.



WHEN YOU ARE DRIVING, ALL YOUR ATTENTION SHOULD BE ON THE ROAD. EVEN IF THE RADIO IS ON WHILE YOU ARE DRIVING, YOUR ATTENTION SHOULD STILL BE ON THE ROAD.

BEFORE RECEIVING OR MAKING A TELEPHONE CALL, ENSURE YOU HAVE PARKED YOUR VEHICLE PROPERLY, OUT OF THE WAY OF TRAFFIC, AND ON A HARD SURFACE.

#### Secret mode

In this mode you can switch off the microphone during a call so the other party does not hear what you are saying in the cab; to do this, use the radio's "mute" function on the steering-wheel-mounted controls (volume and - at the same time). Repeat this action to continue the conversation.



Bluetooth® has a range of a few metres, so if you leave the vehicle, but stay close by, an incoming call will be redirected to the vehicle's loudspeakers via the hands-free mode; to prevent this and take the call on your phone, switch off the radio.

# Audio settings

You can change the settings such as volume, equaliser, balance, etc.

# Adjust the volume

You can increase or decrease the volume by turning the thumb wheel.

The radio switches on automatically at the same volume used before the radio was switched off. However, the volume stays within the predefined minimum and maximum limits.

To access the audio settings, press the "AUDIO" button.

Then scroll through the various settings using the up and down arrows and adjust the value using the right and left arrows.

To exit the audio settings, press "AUDIO" again or wait for approximately 10s.

Features available:

- Equalizer (classic, jazz, rock)
- bass

- midrange
- treble
- Balance (left right)
- Fader (front rear, available if the installation has four loudspeaker systems)

#### Speed-sensitive volume

The "ASC" function (Active Sound Control) adjusts the volume of the audio system to vehicle speed, to compensate for road or engine noise. This function can be set to three levels of sensitivity: low, medium and high. It can also be switched off (OFF).

On delivery the "ASC" function is deactivated.

To activate and select the sensitivity level for this function in the menu, go to "MENU" then "ASC" and confirm by pressing "OK" until the required level is reached (OFF, MIN, MED, MAX).

# Auxiliary, Bluetooth® and USB

#### Different audio inputs

There are three different audio inputs:

- one Bluetooth® wireless input
- two physical inputs, USB and AUX.

Several devices can be connected and be detectable at the same time but the same device cannot be connected via Bluetooth and USB at the same time.

#### USB

#### **USB** mode

The radio is designed to work with USB devices with a memory of up to 16 GB. In some cases, other models may also work.



Insert a USB device to activate the USB mode on the radio. If the radio cannot read your USB device, please disconnect it and try again.

No special operation is required to disconnect a USB device. When a USB device is disconnected, the radio automatically switches to the old source.

A USB device must be connected and recognized for USB mode to show in the list of available sources.

In this case, the "USB" symbol is displayed on the instrument panel.



For USB devices holding a lot of data, the loading operation can take several minutes.

#### Telephones and other devices

Telephones and similar devices may be connected via USB in order to recharge them.

#### Change track, folder and fast forward or fast backward

• Briefly press the "OK >" or "< EXIT" button to play the next track or previous track respectively.

The thumb wheel on the steering-wheel-mounted controls can also be used (down for next track, up for previous track)

- Hold the "OK>" or "<EXIT" button down for fast forward or fast backward respectively.
- if the USB device contains folders, briefly press the up or down button to change folder. Button 6 on the steering-wheel-mounted controls can also be used to access the next folder.

Playback can be paused by pressing button "4 pause" or via the steering column-mounted controls (mute/pause via vol+ and vol- at the same time). To resume playback, press button "3 play" or the steering-wheel-mounted controls.

# "Random playback" and "Repeat" function

• There are three different settings for repeat.

"Repeat all" to repeat all songs (default mode)

"Repeat folder" to repeat the folder

"Repeat song" to repeat the current song. If there is no folder on the USB medium, "Repeat folder" and "Repeat all" will have the same effect. To choose the repeat mode, use button "5". (RPT 1, RPT folder, RPT all)



- There are four different repeat settings for a USB device; random playback is associated with repeat:
- if "Repeat all" is activated, the function will be "Random all" (random playback of all songs)
- if "Repeat folder" is activated, the function will be "Random folder" (random playback of songs in the current folder)
- if "Repeat song" is activated, there is no random playback function. To activate or deactivate the random playback function, use button "2".

The symbols for "Shuffle play" (random playback) and "repeat play" (repeat) are displayed when the functions are activated.

Playback resumes automatically as random play once all tracks have been played.

# **Auxiliary**

### Operation in auxiliary mode

#### Auxiliary mode

Connect the equipment to the jack socket (cable not supplied). Press the "MEDIA" button until "AUX" is displayed on the front panel.

The volume on the auxiliary device should be set to maximum.

The volume may be adjusted via the radio thumbwheel or the Vol+ and Vol- steering column-mounted controls. The "MUTE" action may also be applied.

Note: to change track, fast forward and fast backward, go directly to the AUX device. It is possible to adjust the input volume of the "AUX" source in the radio menu: "MENU", "Advanced" then "AUX input level"

#### Bluetooth®

#### Stream music via Bluetooth®

When one or more Bluetooth® devices are connected, they can be selected for listening to music. The list of paired devices appears in the menu, under "BT Settings", then "Audio device". The device connected is indicated in the list by a " \* " before and after its name. You can change the device by selecting another one from the list (if it is present close by). Only one device at a time can be connected for listening to music. As soon as it is connected, it appears in the list of sources available (access using the "Media" button or the source selection button on the steering-wheel-mounted controls).

The following functions are available:

• Briefly press the "OK >" or "< EXIT" button to play the next track or previous track respectively.

You can also use the thumb wheel on the steering-wheel-mounted controls for this (down for the next track, up for the previous track)

- Hold the "OK>" or "<EXIT" button down for fast forward or fast backward.</li>
- To stop current playback, briefly press button " 4 [pause symbol] " or activate the MUTE/ PAUSE function using the steering-wheel-mounted controls
- To resume playback, briefly press button " 3 [play symbol] " or deactivate the MUTE/ PAUSE function using the steering-wheel-mounted controls

Note: in media playback, the MUTE function switches off the sound without stopping playback (brief press on POWER button).

#### Bluetooth® out of range

When you move away from the truck with the radio working, the connection is interrupted. The connection will be re-established automatically on your return if the interruption lasts less than 10 minutes. After this, to reconnect, switch the radio off, then switch it back on. Music playback will resume from the same point when the connection is re-established (this can take up to 20s depending on the device).

# Location of radio peripherals

Various physical interfaces complete your radio.

Depending on your vehicle's equipment

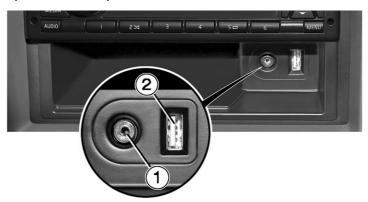
#### Header shelf



#### - (1) - Microphone

The microphone is used in the telephone hands free mode with Bluetooth functionality. Refer to the radio handbook supplied in the on-board kit.

# Dashboard (central location)



- (1) Auxiliary socket
- (2) USB socket

The auxiliary and USB sockets are used to connect to an external source compatible with the radio or for recharging devices.

Refer to the radio handbook supplied in the on-board kit.

# Telephone cradle

Telephone cradle (1) is removable, use thumbwheel (2) to reposition it by:

- rotating the thumbwheel clockwise to loosen it,
- rotating the thumbwheel anti-clockwise to tighten it.



#### Cab ventilation

The ventilation and air conditioning system can heat or cool the inside of the cab, as required. Thanks to the air conditioning, you can also dehumidify the ambient air in the cab and demist your windscreen quickly.

It is completely normal when using the air conditioning to see condensation water running under the vehicle.



DEVELOPMENTS IN THERMAL AND ACOUSTIC COMFORT HAVE RESULTED IN VERY EFFECTIVE SEALING OF CABS. IT IS THEREFORE NECESSARY TO ENSURE SUFFICIENT VENTILATION (PARTLY-OPENED WINDOWS, ROOF VENTILATION HATCH) TO PREVENT AIR FROM BEING TRAPPED DURING LONG PERIODS INSIDE THE CAB.

# Heating, air conditioning and ventilation

- 1. Cab air distribution control.
- 2. Temperature selector.
- 3. Ventilation control.
- 4. Air conditioning control.



In order to limit the risks of leaks following an extended stop, it is recommended to operate the air conditioning at least once a week for a few minutes.

# 1 2 3

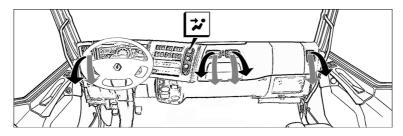
#### Air distribution control

Depending on the position chosen, the control distributes the air to the various output ports.

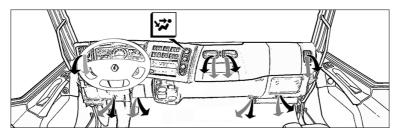
In combination with the temperature selector and the ventilation control, it optimises the temperature according to the positioning of these outlets.



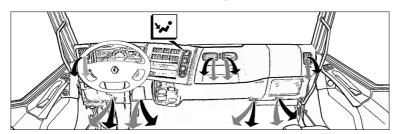
**Position 1:** air directed upwards (vents on dashboard).



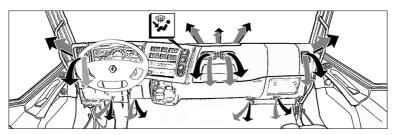
Position 2: air directed upwards (vents on dashboard) and to the lower vents (in footwells).



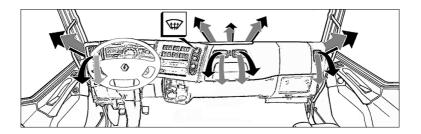
**Position 3:** air directed to the lower vents (in footwells) and slight flow upwards (vents on dashboard).



**Position 4:** air directed to the lower vents (in footwells), upwards (windscreen and side windows) and to dashboard.



Position 5: air directed upwards (windscreen and side windows) and to dashboard air vents.





When the side and central vents are open, the air flow is distributed between the various ports selected by each position of the control.

#### Ventilation control

This control has two functions:

#### Exterior air ventilation function

Turn the control to the right.

- STOP position: stop (air intake closes).
- Position 0: stop (air intake opens slightly).
- Position 1 to 4: fan control (from 1<sup>st</sup> gear to 4<sup>th</sup> gear).

# © 1 STOP 0 1 2 1 2 3 3 3 3

#### Interior air ventilation function (recycling)

Turn the control to the left.

- STOP position: stop (air intake closes).
- Position 1 to 3: fan control (from 1<sup>st</sup> gear to 3<sup>rd</sup> gear).

#### Recycling is used to:

to avoid breathing in contaminated air from outside (road tunnel, polluted area, etc.) or to obtain maximum cooling or heating power.





The recycling function must only be used momentarily

#### Air conditioning control (6)

With the engine running, move the ventilation control to at least position 1, then press the air conditioning control to run the air conditioning system

A built-in warning light illuminates when the air conditioning function is activated.

Set the temperature selector to the required temperature.





If the vehicle is left standing for more than a week, activate the air conditioning, with the engine running and at idling speed.

#### Temperature selector

Position the temperature selector according to the required temperature.

blue zone: cold.

blue/red zone: temperate.

red zone: hot

Once the required adjustment has been made, wait a few moments to check the result before modifying it slightly if necessary.



# Rapid de-icing (warm hold function)

This device accelerates the de-icing function.

After a variable time-delay depending on ambient temperature and engine temperature, this device keeps the engine at the idling speed obtaining at the time and actuates the exhaust retarder to provide a rapid temperature rise in the cooling circuit.

# Conditions enabling the warm hold function

- ambient temperature below 5°C,
- engine coolant temperature below 70°C,
- vehicle speed less than 3 km/h,
- no power take-off active.

#### Conditions overriding the warm hold function

- ambient temperature above 5°C,
- coolant temperature above 70°C,
- vehicle speed above 3 km/h,
- a power take-off engaged,
- change from (N) (neutral) to (D) on the gearbox control.



If the parking brake is not applied, the warm hold function can only be activated after a delay of 150 seconds.

#### Use in cold weather

#### De-icing/demisting

- Close the side and central vents.
- Position the ventilation control on "0" (external air side).
- Position the air distribution control on "de-icing/demisting".
- Position the temperature selector on "hot".

#### As soon as the temperature increases:

- Position the ventilation control on "1".
- Press the air conditioning control.
- Increase the air flow as the engine temperature rises.

Once the "de-icing/demisting" action is complete, position the temperature selector in the required zone. Reaction time varies depending on the position chosen. Maintain a minimum air flow for better efficiency.

#### Use in hot weather

If the temperature inside the cab is greater than the outside temperature:

- Ventilate the cab by driving for a few minutes with the windows down.
- Position the temperature selector on maximum cold and the ventilation control on "4" to obtain a maximum air flow.
- Press the air conditioning control.

#### Once the required comfort has been obtained:

- Move the temperature selector to a more moderate position.
- Choose the position of the air distribution control.
- Reduce ventilation. Maintain a minimum air flow for better efficiency (on "1" at least).

If you wish to increase the heating or cooling power, use the cab air recirculation with the air conditioning engaged. This recirculation should only be momentary.

# Ventilation - Cab temperature management

#### Air vents

# Open flow

Turn thumb wheel (1) to the left.

#### Close flow

Turn thumb wheel (1) to the right.

#### Horizontal orientation

Swivel the vent.

#### Vertical orientation

Use control (2).



Located in the centre of the dashboard.

### Open flow

Turn thumb wheel (1) up.

#### Close flow

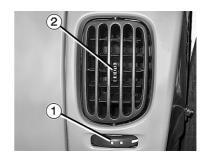
Turn thumb wheel (1) down.

#### Horizontal orientation

Use control (2).

#### Vertical orientation

Swivel the vent.





# Independent heating

The parking heater can heat the cab, even when the engine is not running.

To start up the parking heater, the outdoor temperature must be under 20°C and the temperature measured in the cab must be less than the set point.

#### Parking heater fuel supply

The parking heater runs perfectly on commercially-available diesel fuel. If the device is supplied by a separate tank, this should contain the same diesel fuel as the vehicle tank. When switching from summer diesel fuel to summer diesel fuel, operate the parking heater to drain the pipes.



WHILE USING THE PARKING HEATER, ENSURE THAT DISCHARGE OUTLET (1) IS NOT OBSTRUCTED.





For all RENAULT TRUCKS vehicles using fuel not meeting Standard EN 590, 7% maximum VOME (Vegetable Oil Methyl Ester), the following recommendation must be followed strictly:

- in order to ensure the smooth operation and safeguard the warranty of the parking heater, it must be operated throughout the year, i.e. approximately 20 minutes every month.



When using the parking heater at high altitudes or if you notice any smoke during use, contact a RENAULT TRUCKS approved parking heater garage to have the combustion adjusted.

Any other operation on the heater must be carried out by a RENAULT TRUCKS approved parking heater garage.



The parking heater body must be replaced every 10 years. This operation must be performed by a WEBASTO-qualified RENAULT TRUCKS garage using an original part.

# Independent heating



Switch off the heater unit when approaching service stations. If electric welding is performed on the vehicle, the accumulator batteries must be disconnected to avoid irreparable damage to the electronic control system.

Stop the heater unit, then wait for 3 minutes before switching off the master switch.



DO NOT SWITCH OFF THE VEHICLE'S POWER SUPPLY BEFORE THE END OF THE PARKING HEATER VENTILATION CYCLE.



DEVELOPMENTS IN THERMAL AND ACOUSTIC COMFORT HAVE RESULTED IN VERY EFFECTIVE SEALING OF CABS. IT IS THEREFORE NECESSARY TO ENSURE SUFFICIENT VENTILATION (PARTLY-OPENED WINDOWS, ROOF VENTILATION HATCH) TO PREVENT AIR FROM BEING TRAPPED DURING LONG PERIODS INSIDE THE CAB.

# AT 2000 ST parking heater

Before performing any actions, ensure that the blower vents and recirculation vents are not obstructed. No articles should block the area reserved for the heater.

# Regulation

Set the required temperature using rheostat (1).



# Start-up without programming

Press button (1). Pictogram (2) is displayed.

The igniter is powered and the turbine is spinning at low speed. After approximately 30 seconds, combustion starts. Check device for correct operation. The turbine speed varies as a function of the temperature.



#### Heating operating time

The clock limits the operating time of the heater to 120 minutes.

#### Stop

Press button (1). Warning pictogram (2) is no longer displayed. The turbine continues to rotate to cool the device (delayed stop) then stops automatically.

# Heating program

To programme the heating, refer to the **Multifunction** information display section.

When programming is complete, pictogram (1) appears on the display.





#### Operating incidents

#### Heater fails to start:

The heater will not start. Check the fuse(s) (F57 – F79 – F95 – F107). Press button (1) again.

If the heater does not start after the start-up cycle, contact a RENAULT TRUCKS garage.

# Heater stops while in operation:

# Heater overheating:

Ensure that the blower vents and recirculation vents are not obstructed. No articles should block the area reserved for the heater.

After a few minutes, restart the device (warning pictogram (2) displayed).

If it stops again, contact a RENAULT TRUCKS garage.

The flame goes out; determine the cause:

- faulty fuel supply,
- faulty power supply.
- faulty control box or device.

To restart, switch off the control and restart (no more than three times).

If the heater stops again, contact a RENAULT TRUCKS garage.

# Independent heating



It is prohibited to use the heater unit in enclosed spaces or in areas where flammable or explosive vapours or dust accumulations may occur.

Avoid exposing gas canisters and spray cans to the hot air flow.

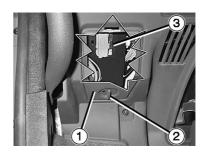
If spot welding is performed on the vehicle, the batteries must be disconnected to avoid destroying the electronic control system.

Stop the heater unit, then wait for 3 minutes before switching off the master switch.

# Diagnostic socket (3)

The diagnostic socket can be used to check the status of the parking heater, using the RENAULT TRUCKS test tool.

To access diagnostic socket (3), open cover (1) by turning catch (2) through ¼ of a turn.

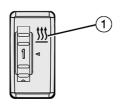


If indicator (2) is flashing, contact a RENAULT TRUCKS garage.



# AT 2000 ST parking heater fault codes

Diode (1) on the rheostat is used to identify various heater unit component operating faults and irregularities detected during the start-up and operating phases.





If the parking heater does not work and diode (1) on the rheostat does not illuminate, check the condition and amperage of air heater fuse F12 then replace it if necessary.

Refer to the Maintenance and servicing section.

If the condition of air heater fuse F12 is compliant, go to a RENAULT TRUCKS approved parking heater garage.

The number of times diode (1) flashes indicates the fault(s) associated with the parking heater.

The parking heater device will switch off and lock out because of error(s) in the following cases:

- 1 flash → No start.

Check your fuel level and the diesel fuel line.

Also check the tightening of the clamps, the connection and the condition of the pipes.

Restart the independent heating.

If the heating does not restart after 2 attempts, go to a RENAULT TRUCKS authorized independent heating service point.

2 flashes → Parking heater stoppage.

Check your fuel level.

If the heating does not restart after 2 attempts, go to a RENAULT TRUCKS authorized independent heating service point.

- 3 flashes → Incorrect operation or stoppage of the parking heater.

Recharge your batteries.

If the heating does not restart after 2 attempts, go to a RENAULT TRUCKS authorized independent heating service point.

- 4, 5, 6, 7 flashes → Go to a RENAULT TRUCKS approved parking heater garage.
- 8 flashes → Parking heater stoppage.

Check for correct installation and no chafing against the grille or fan housing, then correct the fault if necessary.

If the heating does not restart after 2 attempts, go to a RENAULT TRUCKS authorized independent heating service point.

- 9 flashes → Go to a RENAULT TRUCKS approved parking heater garage.
- 10 flashes → Parking heater stoppage.

Check there is nothing obstructing the parking heater air intake.

If the heating does not restart after 2 attempts, go to a RENAULT TRUCKS authorized independent heating service point.

 0, 11, 12, 14, 15 flashes → Go to a RENAULT TRUCKS approved parking heater garage.



Safety

#### Seat belts

In the event of an accident, your seat belt can save your life, and your passenger's life. It must be fastened before the vehicle moves.

The highway code states that you must always wear a seat belt on board a motor vehicle, regardless of where you are sitting.

Always wear your seat belt when you are driving! If necessary, a symbol will be displayed on the instrument panel as a reminder to wear your seatbelt.

#### Driver and passenger seats

#### Seat belts with automatic inertia reel

Unroll the strap slowly to engage tongue (1) in buckle (2). If it jams, thread the belt back slightly the unroll again.





Warning pictogram (S) on the instrument panel informs you that the seat belt is not fastened.



# Unlocking

Press button (3) on casing (4), the belt is wound in by the inertia reel. Keep hold of buckle (1) to make this operation easier.





For your own safety, wear your seat belt for all journeys.

Before starting: first adjust your driving position then adjust your seat belt correctly.



#### NEVER PASS THE HARNESS BELT UNDERNEATH YOUR ARMS OR BEHIND YOUR BACK.

# Child safety

The use of a baby and child restraint is a legislative requirement.

In Europe, children under 12 years of age, of a height less than 1.50 metres and a weight below 36 kilograms, must be secured with a type-approved device suitable for the weight and size of the child.

The driver is responsible for ensuring that this device is used correctly.

We recommend that you select a type-approved device that is compliant with the European ECE 44 regulation.



The legislation in effect in the country in which the vehicle is being driven must be abided by. They may differ from those mentioned here.



BABIES AND CHILDREN MUST NEVER BE TRANSPORTED ON THE LAP OF VEHICLE OCCUPANTS.

NEVER USE A SINGLE BELT TO SECURE TWO PEOPLE.

# Before installing a child seat in the front (if the installation is authorized)

When the passenger seat is so fitted, proceed to make the following adjustments:

- move the passenger seat back as far as it will go;
- straighten the backrest so it is as vertical as possible:
- lower the seat base as far as possible;
- raise the headrest as far as possible;
- place the seat belt height control in low position.

#### First aid kit

Location of first aid kit (1).



#### Devices to detect other road users

To reinforce safety, your vehicle is fitted with a smart camera and a radar that constantly analyse the condition of the roadway and the traffic in front of you.

Although these systems are very advanced, they have a certain limitations that could catch you out if you are not on your guard.

The system may have problems identifying and handling certain situations.

Always be careful while driving.

Be aware of traffic conditions and be ready to apply the brakes at all times.



After a collision or minor impact around the sensor zone, contact a RENAULT TRUCKS service point to check that the operation and settings of the sensors are correct.

- The system has a limited ability to detect:
  - Motorcycles and other small road users
  - Vehicles with unusual shapes, such as boat trailers
  - Vehicles in poor visibility conditions, with strong reflected light or bright lights from oncoming traffic, or reflections from wet roads
  - Vehicles in poor weather conditions, such as fog, heavy rain or clouds of snow from other vehicles

The system cannot detect obstacles or stopped vehicles ahead of the vehicle in front of the truck. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.



When passing, the system may unexpectedly issue a warning or brake the truck if you are driving too close to the vehicle you wish to pass and you are on the same path.



The system has a limited ability to detect whether the vehicle in front of you is leaving the road or moving in another direction. The vehicle may brake unexpectedly or display unnecessary warnings.



The system has a limited ability to detect vehicles that are decelerating close to your truck, becoming too close for the system to detect. Brake to increase the distance between your truck and the vehicle in front of you.



The system has a limited ability to detect stopped vehicles or vehicles whose trajectory is slightly different. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.



The system has a limited ability to detect vehicles that are around a bend. The vehicle may brake or accelerate unexpectedly or display unnecessary warnings.





The system accounts for stationary vehicles as well as vehicles travelling in the same direction in the same lane. It does not account for vehicles crossing the lane or coming from the opposite direction. Additionally, the system does not account for animals, pedestrians or bicycles.



The list provided here is for informational purposes only, and does not depict all situations that may interfere with the system. You should be in constant control of your speed and adjust it according to the profile and condition of the road surface, traffic difficulties, foreseeable obstacles and the legal speed limitations in effect. Relying entirely on the AEBS may put you in dangerous situations that can cause important material damages, serious injury or death.

#### Area in front of radar where no equipment should be mounted



Never paint, apply adhesive tape or fit anything in front of the radar (e.g. additional headlamp, registration plate, marker plate bracket, bodybuilder equipment, etc.). This could cause sensor failure, making it impossible to guarantee correct system operation.

The radar beam must not be obstructed. All types of equipment (tools, snow blade, accessories, etc.) added in this area will cause malfunctions of the FLS radar and its associated functions.

If in doubt, contact your Renault Trucks dealership.



A message "CLEAN CAMERA - REDUCED SAFETY FUNCTION" and its associated icon appear on the multifunction display (4). Clean the area in front of the camera shown in the illustration (in case of snow, ice, dust, etc).

If the anomaly persists after cleaning, contact a RENAULT TRUCKS garage.



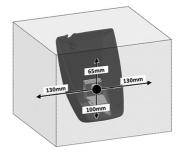


Area in front of the camera where no equipment should be installed



Vehicles equipped with a LPOS camera are subject to restrictions regarding the upper section of the windscreen.

No equipment must be installed or intrude in front of the radar, or 130 mm on either side of, or 65 mm above and 100 mm below the LPOS camera.



# Camera's field of vision where no equipment should be installed



The camera's field of vision must not be obstructed either. Any equipment positioned in this area could interfere with the camera and associated functions.

- · It is not permitted to modify the position of the camera
- Do not cover, paint or attach stickers in front of the camera or in its field of vision



# European Union Declaration of Conformity for radar

SIMPLIFIED EU DECLARATION OF CONFORMITY	By this document, APTIV, 42367 Wuppertal declares that the VMRR2 device complies with the essential requirements and other applicable provisions of directive 2014/53/EU (RED). The original declaration of conformity can be found at www.aptiv.com/ automotive-homologation.		
	Frequency band(s) in which the radio equipment operates: 76–77 GHz		
	Maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates: 25 dBm (316 mW)		



Vehicle operating instructions

# Running-in

During the running-in period (approximately 5,000 km), only operate the engine at full engine speed over short distances. Do not run the engine at speeds that are too high or too low. Monitor the coolant temperature and oil level carefully.

The vehicle should be laden the same as for normal use.

# Use during winter or in cold countries

Weather conditions have a significant impact on the use of your vehicle. To guarantee its performance and reliability, irrespective of conditions, follow the recommendations below.

#### Starting the engine

See chapter Driving.

Before setting off, allow the engine to idle for a few seconds to ensure that the oil is circulating. There is no need to leave the engine warning up for too long; start off at low speed using a range of sufficiently-low gears. Never request maximum engine performance until the temperature has reached 80°C.



INSTALLING A RADIATOR SHROUD OR RADIATOR GRILLE COVER PLATE IS ABSOLUTELY PROHIBITED ON COOLED TURBOCHARGED ENGINES. THIS ACCESSORY PREVENTS THE COOLING OF THE AIR FROM THE TURBOCHARGER AND THEREFORE IMPACTS ON ENGINE POWER AND PERFORMANCE.

# **Engine cooling circuit**

This vehicle is supplied with "ULTRACOOLING PLUS" coolant (Renault Trucks Oils product) in compliance with RENAULT TRUCKS specifications. Depending on its country of use, it provides protection against freezing down to -25°C or -35°C.

# **Battery banks**

Keep the batteries fully charged since their resistance to frost depends on their state of charge.

### Activation by low temperature

Follow the instruction below:

 in external temperatures below – 20°C, let the engine run for 10 minutes to reach gearbox operating temperature.

#### Fuel heater

This device lowers the diesel fuel filtration limit temperature threshold. This filtration limit temperature differs depending on the type of diesel fuel being used.



This device allows fuels not suited to the temperature for use to be used.

If your vehicle is equipped with a fuel heater: the use of additives (oil or kerosene) is prohibited.

# Use during summer or in hot countries

Check battery fluid level frequently. Do not labour the engine, shift gear as often as necessary to keep the engine running at an optimum speed. Coolant circulation will be activated and the temperature will be maintained within the operating norms. Clean the radiator fins frequently, where insects and dirt can obstruct air circulation, by blowing through from the rear side with compressed air. Ensure that the radiator is in perfect condition; descale it if necessary.

# Use in dusty environments

It is recommended to inspect the air filter clogging indicator carefully every day.

#### Air filter

Refer to Workshop maintenance manual.

Do not forget that clogging o the air filter is a function of engine speed, it follows that in use low gear ratios must be used (mountainous routes). Take time into account rather than the distance covered.

A clogged filter may cause serious faults.

# Use at high altitudes

Using the vehicle at certain altitudes has an impact on engine performance. The reduction in power output is approximately 10% for naturally-aspirated engines and approximately 5% for turbocharged engines, for each 1,000 m of altitude. Furthermore, take into account that the boiling point of water is reduced by 3.5°C per 1,000 m of altitude.

# **Turbocharger**

# **Turbocharger faults**

Incorrect operation of the turbocharger is noticeable through a lack of engine power output, unusual noise, oil present in the intake manifold or unusual smoke from the exhaust.

In this case, visit the nearest RENAULT TRUCKS garage. No internal work should be performed on the turbocharger.

# Vehicle operating instructions



Installation of one or more heat shields on the turbocharger is essential to prevent any risk of vehicle fire or damage to the surrounding components.



Any operation on the exhaust pipe or its mountings requires tightening to torque. Contact a RENAULT TRUCKS garage.

# Parking the vehicle

As with driving, you should always take care when parking the vehicle so as not to endanger other road users, and also to avoid damaging your vehicle.

# Short stays (less than ten days)

Make sure that the vehicle is correctly parked (no risk of disturbing the traffic or safety risk for traffic, persons or surrounding facilities, following the highway code).

Avoid parking the vehicle near bends, road junctions or traffic signs where it may obstruct visibility or startle other road users.

Ensure that all electrical systems are switched off or unplugged.

Turn the main power switch to avoid discharging the batteries.

# Parking for less than 30 days

Secure the vehicle without using the parking brake (to prevent the linings from sticking). To do this, immobilise the wheels of the vehicle and regularly check the vehicle's stability.

Raise and protect the wiper blades. Make sure you protect the windscreen to avoid damage in the event that the wiper blades suddenly fold down.

Protect plastic, rubber and glass parts from the effects of UV radiation.

Fill the fuel tank to prevent condensation forming.

Ensure the tyre reach is changed regularly (to avoid any flattening of the tyre tread).

Once a week:

Check that there are no traces of oil, coolant or fuel leaks under the vehicle.

Check levels: engine oil, power steering, etc.

Start the engine and run it until the air pressure light goes out. Monitor the indications shown on the display.

# Parking for over 30 days

Check the condition of the tyres, including the spare (pressure, impact marks or cracks in the sidewalls, etc).

Check that the air intake vents are not blocked.

Check and if necessary recharge the batteries.

Start the engine and leave it running until the air pressure light goes out. Monitor the indications shown on the display.

Check that all the accessories are functioning properly (air conditioning, heating, windscreen wipers, front/rear signals).

- Move the vehicle:
  - 5 to 10 km at a moderate speed allowing the components to warm up as normal.
     When stopped, check for leaks (hubs, axle head, etc).
  - 15 to 20 km at normal speed, up to the maximum speed of the vehicle (while respecting the highway code) to check the behaviour of the vehicle, gear shifting, while taking note of any abnormal noises.

After the checks, if you park the vehicle again, apply the above advice and ensure that the tyres are changed.

Check the lubricating points (hinges, locks, suspension, etc). If necessary, re-lubricate.

In the event of prolonged vehicle immobilisation, the batteries should be regularly monitored - at least every 4 weeks.

If the charge is below the minimum recommended level, you will have to recharge each battery.

If the vehicle is used in when stationary, without starting the engine, pay attention to the power consumption caused by the equipment (tachograph, GPS, radios, etc). More frequent checks will become necessary in this instance.



Driving advice

# **Economic driving**

Eco-driving is a responsible driving behaviour that reduces fuel consumption, reduces wear and tear on your vehicle, lessens driver stress and fatigue, and reduces the risk of accidents.

Always bear in mind that energy efficiency should never come before road safety.

Some tips to reduce fuel consumption and wear and tear on your vehicle:

- Prepare your journey in advance and check the pressure and condition of your tyres. Never forget that poor tyre pressure or high tyre wear leads to extra fuel consumption, poorer handling, increased tyre wear and the risk of bursting or tearing.
- Make sure the vehicle is in good condition. A poorly maintained vehicle can lead to a significant increase in fuel consumption.
- Adopt a flexible driving style. Start smoothly and shift up immediately to avoid over-revving, which leads to higher fuel consumption. Anticipate the need to slow down: use the engine brake rather than the brake pedal. A need to brake indicates that the speed the vehicle had been travelling at excessive speed. This naturally means you have used fuel to reach this speed unnecessarily. Brakes generate heat, and therefore energy. The energy source for your vehicle is fuel. The act of braking leads to fuel consumption.
- Keep your speed constant to avoid using the brakes and wasting fuel unnecessarily. Reduce your speed further. Reducing speed by 10 km/h on the motorway adds a matter of minutes to your journey, but saves litres of fuel.
- In urban environments, GPS data has proven that aggressive driving (strong acceleration and braking, running amber and even red lights, etc.) does not save time. Driver stress, wear and tear on the vehicle, danger to other road users and fuel consumption, however, all increase considerably.
- Switch off the engine if you are going to stop for lengthy periods. Stopping and restarting a vehicle uses less fuel than idling for more than 20 seconds.
- Think before using vehicle accessories. Without energy, there is no source of electricity. The only energy on board a vehicle is fuel. So the more accessories you use (air conditioning, radio, etc), the more energy you will use. Some of these accessories, such as lights, are a safety requirement of the Highway Code. But it is possible to reduce the use of air conditioning without causing any discomfort.

To obtain the best performance using your gearbox, and in particular reduced fuel consumption, adhere to the following rules for driving:

- always select the gear ratio range that allows you to use the engine at its most efficient speed. It is within this range that the maximum torque is found, offering the lowest fuel consumption,
- when selecting manual gears, choose the gear depending on the topography of your route,
- remember that any gear shift will result in increased fuel consumption.

Anticipate slowing down as much as possible and avoid sudden gear changes on the vehicle.



Daily checks

# Daily checks

To avoid any risk of having to stop on route, or causing damage to vehicles that bring about critical faults, we recommend performing the following checks systematically.

# Before getting into the vehicle



Before carrying out any checks and with the aim of preventing false level readings, ensure that the vehicle is positioned on flat ground.

#### In particular, check:

- That there are no traces of oil, coolant or fuel under the vehicle.
- The fluid levels for:
  - the engine
  - power-assisted steering
- The coolant level
- Air filter clogging indicator.
- The screen wash reservoir level.
- The tyre condition and pressure.
- The condition of the rear-view mirror glass.
- The condition of the lights.
- That the connections between the tractor and the trailer have been made.
- Cab locking.
- Sealing of the components. In the event of a leak, clean the breather pipe. A blocked breather pipe generates pressure inside the crank case and causes leaks.

### **Tyres**

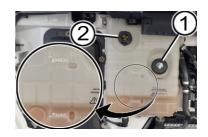
Tyre pressures.

Refer to the Maintenance and servicing section.

# Coolant level

Check the engine coolant level through the transparent wall of the expansion chamber.

When cold, the level must be between the "Min" and "Max" marks; top up if necessary.





THE "PRESSURE-VACUUM" PLUG (2) IS A TARED PLUG TO MAINTAIN A SAFE PRESSURE IN THE COOLING SYSTEM. IT SHOULD NOT BE MOVED.

REMOVE THE FILLER CAP (1) TO TOP UP. CAUTION: NEVER OPEN THIS CAP WHEN THE ENGINE IS HOT, AS LIQUID MAY SPLASH OUT AND CAUSE SERIOUS BURNS.

USE ONLY COOLANT RECOMMENDED BY RENAULT TRUCKS.

### Engine oil level check



Always check the level on horizontal ground, 2 hours after stopping the engine.

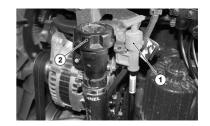
Tilt the cab.

Refer to the Cab tilting section.

Check the oil level using dipstick (1).

Top up the level if necessary.

Filler cap (2).

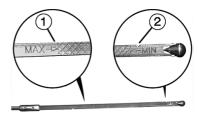


Reading the oil dipstick:

- 1. Maximum level
- 2. Minimum level



The quantity of engine oil between the minimum and maximum levels is approximately 5 litres.



You have the option of topping up the engine oil level via the front, following the instructions on the information display .



# Steering fluid level

Tilt the cab.

Refer to the Cab tilting section.

Check the steering fluid level (2).

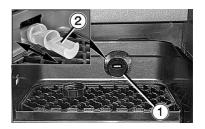
Top up the level if necessary via filler cap (1).



# Screen wash level

Check the level in reservoir (1) regularly. Top up if necessary. To avoid lime scale formation and the blockage of the pipes, it you are recommended to add screen wash additive (RENAULT TRUCKS). This product also works as an anti-freeze agent. It can be maintained throughout the year.

To top up the level, fold back filler duct (2).





Always make sure the washer fluid reservoir is full before driving off. Impaired visibility can be a severe traffic hazard.

#### Screen wash volume

9 Litres.

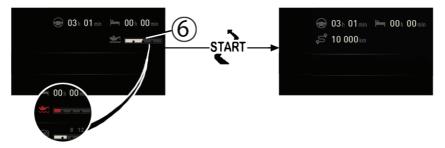
# Engine oil level gauge

The level should be read on level ground after the engine has been stopped for a prolonged period.

When the ignition is switched on:

The oil level is shown in (6) before starting the engine.

If the level is too low, it will appear in red.





If the oil level indicator is faulty, the level check is not available and the additional driving information is displayed when the ignition is switched on.

Check the level on the gauge and go to the nearest RENAULT TRUCKS garage.

### Fuel level indicator

Indicator (1) informs you of the fuel level. When the gauge reaches the low level, the reserve indicator (2) illuminates.

Refuel as soon as possible.



#### AdBlue level indicator

The use of AdBlue is necessary to reduce engine pollutant emissions.

Using the vehicle without AdBlue will result in the road licence being revoked. In the eyes of the law, the vehicle is longer fit to be driven on public roads.



The AA, I and G markers mentioned in this section refer to the AdBlue tank (AA), Information (G) and Service (I) warning lights.

Please refer to the Instrument Panel section.

#### AdBlue level

Indicator (1) provides information on the AdBlue level.



If there is a fault on the AdBlue level sensor, bar graph (1) disappears.



AdBlue level warning pictogram (AA) and the "Service" (I) warning light illuminate,

An icon (2) will appear on the multifunction display.



Different messages will be displayed depending on the level of AdBlue in the tank:

- AdBlue level low, torque reduction will be applied,
- AdBlue level low, torque reduction at next stop.
- AdBlue level low torque reduced.

Refill the AdBlue tank as soon as possible.



After applying the torque reduction, if you do not fill your AdBlue® tank:

A message will warn you of your vehicle speed being limited after 8 hours of operation or the next time you refuel.

Your speed will be limited to 20 km/h, to be applied the next the vehicle is started up and will generate a fault saved in the vehicle memory that cannot be erased and can be viewed by the police.

In order to comply with the emissions limits, the engine management system monitors the exhaust gas after-treatment system.

There are three types of fault on the exhaust gas after-treatment system:

- poor AdBlue quality,
- incorrect AdBlue consumption,
- critical emissions.

If one of these faults is detected by the system:

- the AdBlue tank light (AA) and the "Service" light (I) come on (see illustration at the end of the chapter),
- the icon (2) and an associated message appear on the multifunction display to inform you about the fault. A 50-hour countdown begins, at the end of which the torque reduction will be applied.



Contact a RENAULT TRUCKS service point.

# Daily checks

If the fault is not corrected, the end of the countdown will result in your speed being limited to 20 km/h and a fault log will be recorded in the vehicle memory.

Once this period of time has expired, the speed limit will be applied the next time the vehicle is stopped.

- This fault cannot be deleted.
- The police will be able to see this fault record.



The use of AdBlue is essential for the correct operation of the vehicle and for abiding by legislation in force.

Not using AdBlue may be considered an offence.



After filling the AdBlue tank subsequent to a torque reduction phase due to the level being too low, switch on the ignition, wait for 15 seconds (vehicle stationary) until torque reduction is inhibited.

# Particulate filter clogging indicator

Clogging indicator (1) indicates the clogging level of the particulate filter.

For further information, refer to Particulate filter section

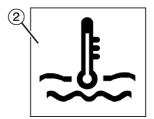


# Coolant temperature indicator

Monitor coolant temperature indicator (1); the temperature should be around 80/100°C. If coolant temperature pictogram (2) is displayed, stop the vehicle and check coolant visually.

In normal driving, the needle should stay below the red zone.





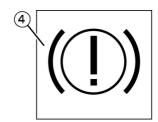
# Air pressure indicator in braking circuit

Indicator (1) provides information about the air pressure in the braking circuit.



When driving, if air pressure warning pictogram (4) appears on the multifunction information display and the STOP warning light illuminates, you must stop the vehicle and contact the nearest RENAULT TRUCKS garage.

After a prolonged stop, it is possible for the air pressure to drop below a limit not allowing the vehicle to set off, start the vehicle to pressurize the air circuit so that warning pictogram (4) is extinguished.





Start-up and driving

### **Immobilizer**

# Starter ignition switch with electronic immobiliser.

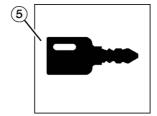
The vehicle is delivered with coded ignition keys paired up to the electronic anti-theft device.

With the master switch engaged, insert the ignition key and turn it to the "ignition" position (3).



Pictogram (5) lights up for a few seconds then goes out.

The system has recognised the key code and authorises engine starting (key in the "start" position (4)).



### PIN code start-up

If there is a transponder malfunction, it is possible to start the vehicle.

Switch on the ignition, with the ignition key in position (3).

The message "Starting impossible" appears on the multifunction information display.

In the "Diagnostic" menu on the multifunction information display, select the "Transponder" submenu and enter the 6-digit code issued by Techline.

Refer to Multifunction information display(s) section.

Confirm.

The following messages can appear:

- "Code correct": the vehicle can be started.
  - "Code incorrect": switch off the ignition and start again.
- "Anti-scanning": you have made three consecutive code errors. The system is now locked for 15 minutes. Leave the ignition on and try again after 15 minutes.

Once the correct code has been entered, switch off the ignition, switch it back on and start the vehicle.



ANY UNAUTHORISED OPERATION ON THE ELECTRONIC IMMOBILISER SYSTEM WILL CAUSE MALFUNCTIONS, MAKING IT DANGEROUS TO OPERATE THE VEHICLE.

# Ignition switch

#### Immobiliser switch:

- "Engine off and immobiliser" position (1): remove the key and turn the steering wheel until the click of the steering lock can be heard.
- "Comfort accessories feed" position (2): engine stopped, steering not locked.
- "Ignition" position (3).
- "Start" position (4).





To stop the engine, turn from position (3) to position (1).

If the key remains locked, do not force it; contact the nearest RENAULT TRUCKS garage.

# Display test

When the ignition is switched on, a self-test takes place for  $3 \rightarrow 4$  seconds. This test checks all the instrument panel indicators for correct operation.

After the display test, pictogram (1) remains illuminated for a few seconds then goes out.





Ignition on, engine shut down, if the engine has not been started 10 seconds after the display test, warning pictogram (1) flashes; this means that a pollution control system test is in progress.

# Statutory test display

After the display test, the "statutory test" mode is activated.

Warning lights for functions to be checked, (2) (vehicle fitted with "ABS" braking system) and (3) (trailer fitted with "ABS" braking system coupled to the vehicle), appear for around 3 seconds in the lower portion of the display.





# Fault(s) display

In the event of a fault or faults, one or more tell-tales appear on the multifunction information display. In this case, the warning pictogram "Service" or "STOP" lights up simultaneously to indicate how serious the fault or faults are.

When a fault is detected, an icon will be displayed, accompanied by a text explaining the nature of the problem (and possibly how to resolve it) on the central part of the display.

An icon will be displayed in the lower right corner of the display.

The colour of the icon will depend on the severity of the problem: red for critical defects (4), orange for significant defects (5) and white for advisory issues (6).



If more than one fault and advisory notices occur simultaneously, only one icon will appear. It will use the colour representing the most important information.

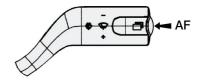
A warning light will be shown in the upper part of the display at the same time as the fault icon:

- The information warning light (7) means that a new message has appeared on the multifunction display,
- The STOP light (8) requires the driver to stop immediately,
- The service warning light(9) means you should go to the nearest RENAULT TRUCKS garage.



You can clear a fault by:

- pressing control (AF),
- pressing remote control "EXIT" button (2).





A fault associated with the "STOP" indicator can only be recorded temporarily.



If various faults are present ("Service" and "STOP"), only the "STOP" indicator illuminates.

# Maintenance display

multifunction information display.

The maintenance icon (10) may come on in 2 possible scenarios:

- as a pre-warning, along with the "Information" light, until the engine is started,
- as a warning, along with the "Service" warning light. In this case, please refer to the maintenance menu (see the Multifunction information display section) and go to the nearest RENAULT TRUCKS garage for a maintenance service.



A text appears on the display next to the icon to show the relevant maintenance level. Following an alert, look up the component in question in the maintenance menu on the

# Before starting

Main menu => Experts => Maintenance.

Depending on the component concerned, you may be able to reset the maintenance schedule.

If you are unsure about any message or icon that come on the display, please ask at a RENAULT TRUCKS garage.

# **Engine start-up**

When you start up your engine, it is important to follow the procedure described below to avoid any risks of damaging your batteries, the starter motor and even your engine.

Ensure that the parking brake is engaged.

Ensure that the gear selector is in neutral position.

The key is inserted in position 1, corresponding to vehicle off mode.

#### Turn the key to:

- put the truck in accessory mode (position 2).
- put the truck in ignition mode (position 3), the indicator lights come on and the instruments on the dashboard are activated.

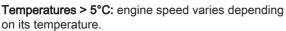
Before starting, wait for the instrument panel warning lights and instrument lighting to switch off.

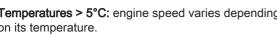
launch the truck start-up process (position 4). This position should only be maintained until the engine has started.

Without accelerating, operate the starter motor.

#### Temperatures ≤ 5°C:

- put the key in position (3) (pre-heating), wait for the pre-heating pictogram to disappear from the multifunction information display, turn the key to position (4) to operate the starter motor and release the key as soon as the engine starts.
- engine speed varies according to its temperature and the "warm hold" function is activated (refer to the Ventilation - Air conditioning section).







The use of "Start pilote" type products (ether) for starting the engine is strictly forbidden (serious risk of spontaneous combustion or explosion).

21DJ002535 161



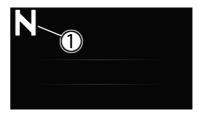
#### Do not set off until:

- The brake air pressure warning icon (1) disappears, the brake air pressure warning light (2) goes out and the braking functions are operative.
- By setting the parking brake to the road position, warning pictogram (3) goes out.



Check that there is no fault warning pictogram displayed on the multifunction information display.

Symbol "N" (1) indicates that the gearbox is in the neutral position.



# Engine starting with "electronic starter" function

Depending on your vehicle's equipment

The key is inserted in position 1, corresponding to vehicle off mode.

#### Turn the key to:

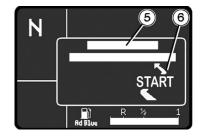
- put the truck in accessory mode (position 2),
- put the truck in ignition mode (position 3), the warning lights come on and the dashboard instruments are activated.
- to start, wait for the instrument panel warning lights and instrument lighting to switch off,
- launch the truck start-up process (position 4). This position should only be maintained until the engine has started.

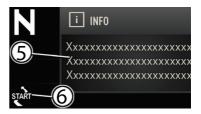
#### Normal use:

Without accelerating, turn and hold the key in position (4) so that the starter motor turns over the engine. Release the key in position (3) when the engine starts.



However, if the starter motor drive phase is interrupted before starting the engine and we want to reactivate the starter motor immediately, pictogram (6) and associated message (5) appear on the multifunction information display asking you to wait. In this case, hold the key in position (4) for three seconds so that the starter motor turns over the engine again. Release the key in position (3) when the engine starts.





#### Limp home



Using the starter motor for a "limp home" function is only authorised in situations of danger (immobilisation on level crossings, etc.). To do this, turn the ignition key 3 times in less than 2.5 seconds from position (3) to position (4). This operation is stored in the memory and can be viewed using the RENAULT TRUCKS test tool.

### Engine idle adjustment device

This device adjusts idling speed within a range between 550 and 800 rpm.

#### Use

With the vehicle stopped, parking brake engaged and engine idling, press the "O" on the steering wheel control 3 times in less than 2 seconds, then set the new idle power:

- press "+" on the steering wheel control to increase the engine speed,
- press "-" on the steering wheel control to reduce the engine speed.



Press and hold to adjust idling progressively.

Once the idle power has been set, press and release the clutch or brake pedal to save the new idle power.

# Fast idling device

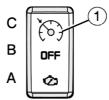
This device controls the engine idle speed, with the vehicle stationary.

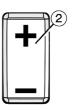
#### Use

Parking brake applied, gearbox in neutral, move switch (1) to "A".

It is possible to adjust the engine speed by pressing either switch (2) or the accelerator pedal.

To store the engine speed using the accelerator pedal, press "+" or "-" on switch (2) then release the pedal.







After the function has been activated by moving switch (1) to "A", moving switch (2) to "+" directly restores the nominal speed of 900 rpm.



Avoid using the accelerator pedal while using fast idle.

#### To fine tune the speed:

- Move switch (2) to "+" to increase the engine speed progressively, or press briefly to increase the speed in steps of 50 rpm.
- Move switch (2) to "-" to decrease the engine speed progressively, or press briefly to decrease the speed in steps of 50 rpm.

### Deactivating the function

The function is deactivated automatically if:

- the parking brake is released,
- a gear is engaged,
- switch (1) is moved to "B".

When at least one PTO is in service, the first action on switch (2) calls up the factory-set engine speed (1,000 rpm).

This speed can be adjusted but limited to 1,500 rpm (refer to Power take-off(s) section).

Depending on the equipment installed by the equipment manufacturer, this speed and the input conditions can be modified using the RENAULT TRUCKS test tool.

21DJ002535

#### Geolocation

If your vehicle breaks down, you can be geolocated by this system, through the 24/7 breakdown assistance service.

#### **Operations**

If your vehicle is immobilised, contact the 24/7 breakdown assistance service. **Tel: 00 800 1 234 24 24.** 

After the usual formalities, you will be asked to press the switch (1).

Switch (1) will light up orange for 1 to 3 minutes during the search for your location.

Once your vehicle has been located, switch (1) is no longer lit and the operator confirms your location to you.



The 24/7 breakdown assistance service contacts the RENAULT TRUCKS garage closest to your location to provide you with assistance.

# Hydraulic power-assisted steering



When the engine is stopped, the hydraulic power assistance is no longer operational, the force required to turn the steering wheel is significant.

If the steering becomes heavy while driving, stop the vehicle and determine the cause. If any fault is detected, stop the vehicle and determine the cause.

- Check the level of the fluid in the reservoir.
- Check for any leaks on the hose connections or on the pipes; if there are, repair the leaks if possible (retighten connections or replace hoses).

Refill the reservoir with clean fluid of the recommended grade. Restart the engine and ensure that the pump is operating normally, perform several manoeuvres at low speed and at low engine speeds.

If the steering is still heavy, or if there is still doubt whether the pump is operating normally, have the assembly inspected at a RENAULT TRUCKS garage.

In no event must hydraulic components be removed or their initial setting modified. This work should be entrusted to a RENAULT TRUCKS garage.

The hydraulic system can only function correctly if it is perfectly clean. The greatest precautions must be taken on this matter when carrying out the above operations.

# Operating speed

Always select the gear ratio that allows you to use the engine at its most efficient engine speed, which is shown as a green sector (1) on the engine speed indicator of the tachometer.

When using the retarder, a blue sector (2) is displayed on the engine speed indicator on the tachometer. This blue sector tells you the maximum efficiency range for the retarder.



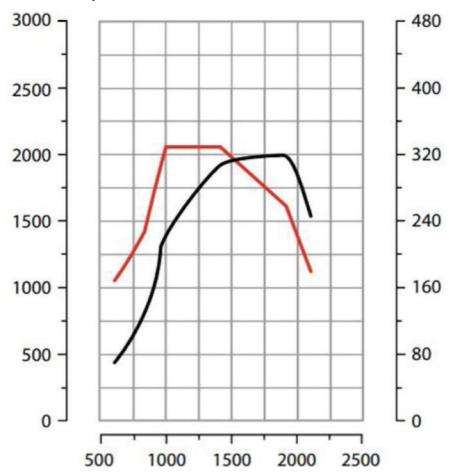


When the engine speed approaches within 400 rpm of its maximum speed, a red sector (3) is shown on the engine speed counter on the tachometer.

Never let the engine speed reach the red sector.

### Power and engine torque curves

These curves are given as a guide, the torque or power values may vary slightly depending on the model of your vehicle.



# Speed limiter

Above 30 km/h, this function prevents the vehicle from exceeding the intended speed, even if the accelerator pedal is still being pushed.

### Activating speed limiter mode

 Move the switch to position "A" to choose the speed limiter mode.



 Press the "+" or "-" button on the steering wheel to activate the speed limiter mode and set the setpoint speed.

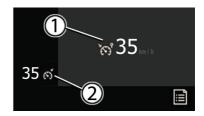




If the vehicle's speed is lower than 30 km/h when the speed limiter is activated, the setpoint speed will be 30 km/h.



When activating the cruise control or adjusting the set speed, the saved set speed and an icon are displayed in the main area (1) and in the cruise control information area (2) of the multifunction display. After a few seconds, this information is shown in area (2) only.



When a set speed is saved in the vehicle memory, the driving experience will feel the same as before the speed limiter was activated until this speed is reached.

Once the set speed is reached, the vehicle will no longer accelerate, even if you keep pressing the accelerator.

If necessary, it is possible to temporarily exceed the set speed. Please refer to the "Exceeding the cruising set speed" section.

21DJ002535

#### Adjusting the cruising setpoint speed

To adjust your limitation speed:

- A short press of the "+" button increases the setpoint speed by 1 km/h. One long press of the "+" button increases the setpoint speed by 5 km/h
- A short press of the "-" button decreases the setpoint speed by 1 km/h. One long press of the "-" button decreases the setpoint speed by 5 km/h.



### Exceeding the limitation setpoint speed

It is possible to exceed the setpoint speed (2) temporarily. To do so, press the accelerator all the way down ("kick down" function).

During the time the speed is exceeded, set speed (2) flashes on the speed information display.

When you release the accelerator pedal, speed limiter mode resumes automatically as soon as the speed is less than the setpoint speed stored in the memory (2).



### Maintaining the cruising setpoint speed

When going downhill, if necessary, the cruise control automatically controls the retarder to maintain the speed within 2 km/h above the set speed stored in memory.

A blue sector appears in zone (1) of the tachometer to indicate the engine speed at which retarder efficiency is optimal.



If the retarders cannot maintain set speed (2), the speed flashes on the speed information display; it is necessary to use the brakes.





In this case it is recommended to memorize a lower speed and/or to downshift.

### Speed limiter function standby

The function is suspended by pressing the "O" control on the steering wheel. An icon (2) showing "OFF" is displayed and the set speed remains displayed.



### Recalling the limitation setpoint speed

A set speed is saved on the speed information display can be recalled and re-applied.

Press on the "RES" button on the steering wheel.



The word "OFF" on the icon (1) will disappear and the set speed will be automatically re-applied.

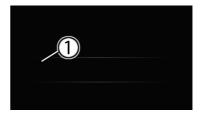


#### Deactivating the speed limiter mode

To deactivate the speed limiter, turn the switch to position "B".



The icon and the saved set speed will disappear from area (1) of the display.



### Fault present on speed limiter mode

Contact a RENAULT TRUCKS service point.



# Adaptive cruise control



ADAPTIVE CRUISE CONTROL MUST BE USED ON WELL-MAINTAINED HIGHWAYS OR EXPRESSWAYS.

ADAPTIVE CRUISE CONTROL IS A DRIVING AID MODE AND CANNOT UNDER ANY CIRCUMSTANCES REPLACE COMPLIANCE WITH SAFETY DISTANCES AND SPEED LIMITATIONS OR THE DRIVER'S RESPONSIBILITY.

Above 30 km/h, this function allows the vehicle to be driven at a stabilised speed and automatically helps the driver to maintain a safe distance from the vehicle in front. If there

is no vehicle in front, the "ACC" adaptive cruise control mode functions in the same way as the regular cruise control mode.

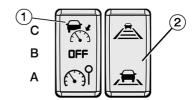
You can select from 3 "ACC" modes, each with a predefined distance setting. The distance settings increase in length from "ACC1" mode.



If you wait less than 9 seconds after switching off the ignition to reset it, the system will display error messages and may not work.

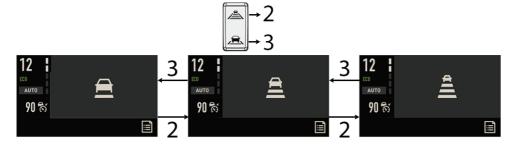
### Activating adaptive cruise control mode

- Take the vehicle to the required speed using the accelerator pedal, the retarder control or the service brake.
- Move the switch (1) to position "C" to choose the adaptive cruise control mode.

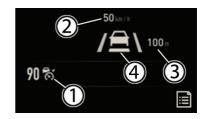


Press the switch (2) while it is in position "C" to activate and choose the "ACC" mode (3) from the multipurpose display screen.
 You can choose from 3 distances.

To change the distance, press on the switch (2) while it is in position "C" to increase the distance or position "A" to decrease the distance.



Once the ACC mode has been chosen, the "ACC" icon (1) and the set speed will be displayed.





In the "additional driving information" section, you will find all of the information regarding adaptive cruise control:

- (2) speed set to match the vehicle in front of you,
- (3) distance between you and the vehicle in front of you,
- (4) ACC level requested.

The distance to the vehicle in front is defined by a time gap, thus the distance in metres depend on the truck's speed.

The lines indicate current time gap. Minimum setting is one line, which corresponds to a time gap of 1.5 seconds. Each additional line increases the current time gap by 0.5 seconds.

Each time the truck is started the time gap distance used at last key-off is automatically restored.

The time gap setting also influences the behaviour of ACC.

- A shorter time gap prioritizes quick adaption to the traffic flow.
- A longer time gap prioritizes more comfortable and fuel-efficient performance.

To save fuel, select a longer time gap.

### Adjusting the cruising speed setting

To adjust your cruising speed:

- A short press of the "+" button increases the setpoint speed by 1 km/h. One long press of the "+" button increases the setpoint speed by steps of 5 km/h.
- A short press of the "-" button decreases the setpoint speed by 1 km/h. One long press of the "-" button decreases the setpoint speed by steps of 5 km/h.

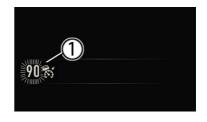


#### Exceeding the cruising setpoint speed

It is possible to exceed the setpoint speed (1) temporarily.

During the time the speed is exceeded, set speed (1) flashes on the speed information display.

When you release the accelerator pedal, adaptive cruise control resumes automatically as soon as the speed is less than the setpoint speed stored in the memory (1).



### Maintaining the limitation setpoint speed

When going downhill, if necessary, the adaptive cruise control automatically controls the service brake and the retarder to maintain the speed within 4 km/h above the set speed stored in memory.

A blue sector appears in zone (1) of the tachometer to indicate the engine speed at which retarder efficiency is optimal.



If the retarders cannot maintain set speed (1), the speed flashes on the speed information display; it is necessary to use the brakes.



In this case it is recommended to memorize a lower speed and/or to downshift.

# Detecting a vehicle with the adaptive cruise control function

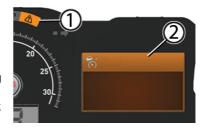
When the "ACC" function detects a slower vehicle in front of you, the function will slow down your vehicle as it approaches in order to maintain the setpoint distance between the two vehicles.



Depending on changes in traffic conditions, it is possible to modify the "ACC" mode levels using the selection control while retaining the set speed defined when the "ACC" mode was activated.

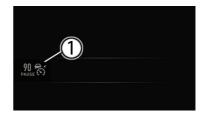
If the system detects that the distance between your vehicle and the one in front is too small:

- An audible alarm will sound.
- The "Service" (1) warning light will come on.
- A window (2) will appear on the display warning you that you are not keeping an appropriate distance, advising you to brake to avoid the risk of collision.



### Adaptive cruise control function standby

- you press control "O" on the steering wheel,
- vehicle speed is less than 15 km/h,
- you operate the brake pedal or the retarder control.

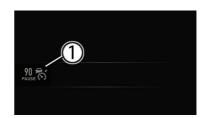




Adaptive cruise control is suspended when "ABS", "ASR" or "ESC" is engaged.

# Recalling the cruising setpoint speed

If a set speed (1) is stored in memory on the speed information display, it is possible to recall it.



Press on the "RES" button on the steering wheel.

The word "pause" associated with the icon (1) will disappear and the stated set speed will be automatically re-applied.

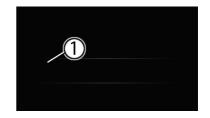


## Deactivating the adaptive cruise control mode

To deactivate adaptive cruise control, turn the switch (1) to position "B".



The icon and the saved set speed will disappear from area (1) of the display.



## Unusual driving situations



The system may have problems identifying and managing certain traffic situations. It is always the driver's responsibility to keep safe distances from other vehicles and manage their speed.

In order to recognise and thereby avoid situations where the system might not perform correctly, please refer to the "<STRONG>Devices to detect other road users</STRONG>" pages in the <STRONG>Safety</STRONG> chapter.

An icon (2) and its associated message "CLEAN RADAR - AEBS DISABLED" will appear on the multifunction display.

Clean the area in front of the radar as shown in the illustration (in case of snow, ice, dust, etc).

Once the sensor has been cleaned, the function is reinitialised after a few minutes of driving, or when restarting the vehicle.

If the anomaly persists after cleaning, contact a RENAULT TRUCKS service point.



21DJ002535



If the area in front of the sensor is changed, Renault Trucks cannot quarantee that the system will work properly.



## Issue with adaptive cruise control mode

Contact a RENAULT TRUCKS service point.



## **Electronic speed limiter**

The speed limiter is managed by the electronic injection system. In the event of an operating fault, only RENAULT TRUCKS garages are qualified to intervene.

## Accelerator pedal

The technology used to drive your Renault Trucks vehicle requires a great deal of precision. Also, it is possible that the accelerator pedal may need to be calibrated.

If this is the case, messages will appear on the display telling you how to proceed. Follow the instructions carefully, and if in doubt, please contact your nearest Renault Trucks service point.

Depressing beyond a hard spot at the end of the pedal travel enables the driver to modify the gear shift management system to obtain optimum drive for the vehicle.



This function increases fuel consumption.

## Lane departure warning system (LDWS)

#### Description

This function uses the road marking lines to visualise the position of the vehicle in relation to these white lines.

The lane departure warning system warns you in the event of accidental lane departure.



YOU SHOULD BE IN CONSTANT CONTROL OF YOUR SPEED AND ADJUST IT ACCORDING TO THE PROFILE AND CONDITION OF THE ROAD SURFACE, TRAFFIC DIFFICULTIES, FORESEEABLE OBSTACLES AND THE LEGAL SPEED LIMITATIONS IN FORCE.

The function is activated by default when the vehicles is started.

## Operating conditions

- detection of white lines on the road;
- vehicle speed above 60 km/h;
- function active:
- no function input data errors.

## Operations

The camera positioned behind the windscreen recognizes the different lines and markings on the road.

It then calculates the distance separating it from the right-hand and left-hand lines on the road.

On the basis of this distance, the camera determines whether the vehicle is moving closer to a line on the road and whether it is crossing it.

The system recognises that the wagon has reached a line when the tyre tread is covering the line.

If the line is crossed inadvertently, warning pictogram (1) flashes and an audible warning sounds at the instrument panel.

On the display, one of the lines shown (2) flashes to indicate which side of the lane the vehicle is crossing.



Inadvertent line crossing detection conditions:

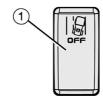
- the direction indicators have not been activated for the last 4 seconds:
- the white lines on the road are visible;
- the white lines are regular;
- during the 4 last seconds, the system has detected that the vehicle was in its traffic lane:
- there have been no warnings from the system in the last 4 seconds.



After activating the lane departure warning, the system can only issue further warnings once the vehicle is inside the road lane markings again.

## Deactivating the function

You can deactivate the function manually by pressing switch (1).



Indicator pictogram (1) is displayed.



In some cases, the function can be deactivated:

if the white lines on the road are not visible;

- in the event of roadworks:
- if the weather conditions are poor (heavy rain, snow, etc.);
- if the road is very narrow and winding.

In order to recognise and thereby avoid situations where the system might not perform correctly, please refer to the "Devices to detect other road users" pages in the Safety chapter.



The function is reactivated by default the next time the vehicle is started.

## LDWS system fault

- warning pictogram (1) lights up,
- "SERVICE" (2) indicator illuminates,
- A window will appear on the display (3) showing the message "STOP AT WORKSHOP
   I DWS NOT OPERATING".

Contact a RENAULT TRUCKS service point.



## Detection of an anomaly on the camera

A message "CLEAN CAMERA - REDUCED SAFETY FUNCTION" and its associated icon appear on the multifunction display (4). Clean the area in front of the camera shown in the illustration (in case of snow, ice, dust, etc).

If the anomaly persists after cleaning, contact a RENAULT TRUCKS garage.





## Automatic emergency braking system (AEBS)

#### Description

The purpose of this function is to avoid colliding with the rear of motor vehicles travelling in front of and in the same direction as your vehicle, or to reduce the impact of such a collision if it is unavoidable. To do this, it detects moving and stationary vehicles in front of your vehicle and determines whether they represent a potential risk.

It informs you of dangerous situations, warns you by means of a visual and audible signal, and brakes your vehicle in the event of an imminent accident with the vehicle in front of you.

This function does not necessarily prevent the accident, but it can limit the consequences.

To do this, the AEBS system merges the data from two sensors (camera and radar) enabling it to detect and identify objects located in the area in front of your vehicle, and to determine their position and movement.



THE AEBS WILL NOT DETECT ALL POTENTIAL HAZARDS; IT IS ONLY A TOOL INTENDED TO COMPLEMENT DRIVING. YOU SHOULD BE IN CONSTANT CONTROL OF YOUR SPEED AND ADJUST IT ACCORDING TO THE PROFILE AND CONDITION OF THE ROAD SURFACE, TRAFFIC DIFFICULTIES, FORESEEABLE OBSTACLES AND THE LEGAL SPEED LIMITATIONS IN EFFECT. RELYING ENTIRELY ON THE AEBS MAY PUT YOU IN DANGEROUS SITUATIONS THAT CAN CAUSE IMPORTANT MATERIAL DAMAGES, SERIOUS INJURY OR DEATH.



THIS SYSTEM IS DESIGNED TO TRIGGER IN HAZARDOUS SITUATIONS. IT MUST NOT BE TRIED OR TESTED.



If you wait less than 9 seconds after switching off the ignition to reset it, the system will display error messages and may not work.

The function is activated by default when the vehicles is started.

## Operating conditions

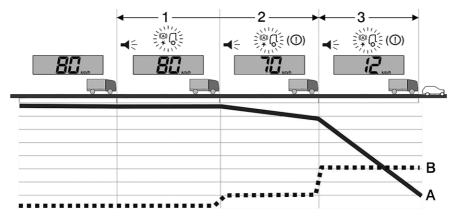
- vehicle speed above 5 km/h;
- function active:
- no function input data errors.



The system may display limited functionality if there is snow, ice or dirt in the immediate surroundings of the radar or camera. Adverse weather conditions such as heavy rain, fog or strong incident light can also limit functionality, in particular for the detection of stationary vehicles.

## **Operations**

Depending on the information received by the sensors and the camera on the situation in front of your vehicle, the system warns you and brakes your vehicle if there is a risk of collision with the vehicle in front of you.



These situations are divided into 3 phases and calculated as a function of your vehicle speed, the distance between your vehicle and the one in front of you, and its speed. In some situations, the system may go through several steps to respond to the severity of the situation.

A: speed curve.

B: deceleration curve.

## 1 - Warning

If the driver does not notice a collision hazard detected by the system, the indicator (1) will flash and an alarm will sound to alert them that the situation is hazardous, but the vehicle's speed will not change.





You may see this warning frequently if driving aggressively.

#### 2 - Partial braking

If you do not react to the collision warning, warning pictogram (1) flashes, an audible warning sounds and the automatic activation of partial braking warns you of the risk of imminent collision and begins to decelerate the vehicle.



When the system no longer detects a collision hazard, an icon (1) and a message (2) will notify you that the system automatically applied the brakes.



## 3 - Emergency braking

If you do not react to the collision warning or to partial braking, the previous audible and visual (1) warnings continue and emergency braking is activated automatically to try to avoid the collision.





During the emergency braking phase the brake lights flash; once the vehicle has stopped the hazard warning lights flash.

The emergency braking phase is interrupted if one of the following conditions is met

 disappearance of the risk of collision as a result of avoidance on your part or if the vehicle in front of you changes direction;

- the speed of your vehicle drops to less than or equal to that of the vehicle in front of you as a result of emergency braking;
- your vehicle comes to a complete standstill as a result of emergency braking;
- the accelerator pedal is fully depressed "Kick down".

Once the risk of collision has been averted by emergency braking, a message on the display tells you that you should either apply the parking brake or resume your journey.

Once your vehicle has been brought to a complete stop by the system, it automatically keeps the brakes applied until the brake pedal is depressed, the accelerator pedal is depressed, reverse gear is engaged or the parking brake is engaged.



Once three emergency braking events have been triggered, the system is deactivated. Contact a RENAULT TRUCKS service point to reactivate it.



After a collision or minor impact around the sensor zone, contact a RENAULT TRUCKS service point to check that the operation and settings of the sensors are correct.

## Situations requiring attention

The system may have problems identifying and handling certain situations. Always be careful while driving.

Be aware of traffic conditions and be ready to apply the brakes at all times.

- The system has a limited ability to detect:
  - Motorcycles and other small road users
  - Vehicles with unusual shapes, such as boat trailers
  - Vehicles in poor visibility conditions, with strong reflected light or bright lights from oncoming traffic, or reflections from wet roads
  - Vehicles in poor weather conditions, such as fog, heavy rain or clouds of snow from other vehicles

In order to recognise and thereby avoid situations where the system might not perform correctly, please refer to the "Devices to detect other road users" pages in the Safety chapter.



The system accounts for stationary vehicles as well as vehicles travelling in the same direction in the same lane. It does not account for vehicles crossing the lane or coming from the opposite direction. Additionally, the system does not account for animals, pedestrians or bicycles.

21DJ002535

## Deactivating the function

You can deactivate the function manually by pressing switch (1).



Indicator pictogram (2) is displayed.

A warning light (1) comes on.



In some cases, the function should be deactivated:

- if the vehicle is towing several trailers;
- if the trailer has a faulty ABS or is not fitted with the ABS system;
- if the vehicle is fitted with a tool holder (e.g. snow plough);
- if the front of the vehicle is damaged.



The function will reactivate by default the next time the vehicle is started.

## **AEBS** system fault

If a fault is detected by the system:

- the "SERVICE" (1) warning light will come on.
- An icon (2) will appear on the display.
- warning pictogram (3) lights up,
- the message (4) "STOP AT WORKSHOP -AEBS NOT OPERATING" appears on the multifunction display,

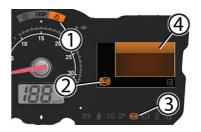


Contact a RENAULT TRUCKS service point.

The "AEBS" system requires all trailers to have ABS in working order to ensure the stability of the tractor/trailer combination under emergency braking.



If the "AEBS" system detects that the trailer has a faulty ABS or is not fitted with ABS, warning pictogram (1) and "SERVICE" indicator (2) illuminate; warning pictogram (3) and associated message (4) appear on the multifunction information display telling you about the ABS system.



## Reversing buzzer

When shifting to reverse gear, an audible warning signals to those in proximity that the vehicle is reversing.

A switch deactivates the "buzzer" function.



## "EBS" system

The "EBS" system manages vehicle braking and assures anti-lock braking and anti-slip regulator functions.

## Anti-lock braking system "ABS"

This system prevents the wheels from locking under sharp braking.

In this way, the vehicle retains its manoeuvrability.

## "ASR" Anti-slip regulation system

When you move away or under acceleration, this system prevents the wheels from slipping, whatever the condition of the road surface.

This function is activated:

- if a wheel slips, this wheel is braked to bring its speed into line with that of the opposite wheel;
- if two wheels slip, engine speed is limited then the slipping wheel is braked to bring its speed into line with that of the wheel opposite.

#### On the road

During operation of the ASR system, indicator pictogram (1) flashes.

For further information on the "ASR" system, refer to the **Driving on difficult terrain** section.



## "DTC" system: dynamic traction control

This system ensures better stability and traction of the vehicle, by preventing the drive wheels from skidding on surfaces with low adhesion on hard acceleration or when downshifting.

During operation of the DTC system, pictogram (1) flashes



## **Emergency brake assist**

By measuring the speed at which the brake pedal is depressed, the system serves to detect an emergency braking situation.

In this case, the braking pressures are reduced to obtain more efficient braking.

This function ensures maximum power is available in the event of emergency braking.

Under severe deceleration, the stop lights flash to warn following vehicles.

The stop lights cease to flash as soon as deceleration returns to normal.

## "ESC" system

This is a stabilisation system that reduces the risks of skidding and rollover.

## "ESC": electronic stability control

If the system detects a risk of skidding (understeer or oversteer), acceleration is reduced and the brakes are automatically applied to the wheels, keeping the vehicle on its path.

Active retarders are automatically deactivated in an ESC phase.

Indicator pictogram (1) flashes during the ESC phase.



#### "ESC": anti-rollover

If the system detects a risk of rolling over, acceleration is reduced. If this reduction is insufficient, the system automatically brakes the vehicle to reduce its speed.

The function is optimised when it is combined with a trailer fitted with ABS or EBS.



Use the vehicle in the same way as a vehicle without ESC.

ESC reduces the risk of rolling over or skidding. However, a vehicle can roll over if the load has a very high centre of gravity, if it strikes a kerb at high speed or in the event of unsuitable driving. The vehicle may also lose traction on icy roads despite being fitted with ESC.

#### "ESC": trailer

Pictogram (1) flashes if the ESC system intervenes on a trailer fitted with stability control.



## Faulty "ESC" system warning

- "Service" indicator (1) illuminates,
- a message (2) and an icon (3) appear on the display,
- the warning lights (4) and (5) come on.

Visit your nearest RENAULT TRUCKS service centre.





DO NOT USE A VEHICLE FITTED WITH ESC ON A TRACK WITH VERY STEEP BENDS (SUCH AS A TEST CIRCUIT).



USING THE VEHICLE ON ROADS WITH RAISED EDGES MAY RESULT IN DANGEROUS INTERVENTIONS OF THE ESC SYSTEM. IF THE VEHICLE MUST BE DRIVEN ON THIS TYPE OF ROAD, VISIT A RENAULT TRUCKS GARAGE TO DISABLE THE ESC FUNCTION.



This function is an additional aid in the event of critical driving conditions.

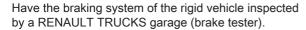
However, it does not increase the limits of the vehicle.

It should not encourage you to drive more quickly. In no instance must it replace the vigilance or responsibility of the driver while driving (the driver must always be alert for sudden events which may happen while driving).

## "EBS" system faults

If the system detects a minor loss of braking performance:

- the "Service" (1) warning light will come on,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up in yellow.





If the minor braking fault causes a loss of the "ABS" funct will appear on the multifunction display.

The vehicle's conventional braking is restored.



If the system detects a major loss of braking performance:

- the "STOP" warning light (1) is displayed,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up in red.



It is imperative to stop the vehicle and contact the nearest RENAULT TRUCKS garage.

If the system detects a minor loss of performance of the trailer's "ABS" system:

- warning pictogram (1) lights up in yellow;
- warning pictogram (2) and associated message (3) appear on the multifunction information display:
- "Service" indicator (4) illuminates.
- the "Service" (1) warning light will come on,
- an icon (2) will appear on the multifunction display along with a warning message,
- warning pictogram (3) lights up in yellow.



Have the braking system of the rigid and trailer inspected by a RENAULT TRUCKS garage (brake tester).

- the "STOP" warning light (1) is displayed,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up in yellow and warning pictogram (4) lights up in red.

It is imperative to stop the vehicle and contact the nearest RENAULT TRUCKS garage.





In the event of an electronic control mode fault, the EBS system switches to pneumatic backup mode and a difference in feel on the brake pedal may be felt. Maximum braking power is still available when the pedal is depressed fully.

#### "ESC": trailer

On a rigid-drawbar vehicle, even if the rigid is not fitted with ESC, it is likely to tow a trailer fitted with ESC. In this situation, and if the trailer ESC system intervenes, pictogram (1) flashes.



#### Brake temperature warning

If the system detects that the brake temperature is too high, the "Information" light (1) comes on, along with an icon (2) and a message on the multifunction display.



A loss of sensation may be felt when pressing the brake pedal.

It is then necessary to adapt the vehicle speed and driving style. Use the retarder(s).

## Brake pad wear warning

- the "Service" (1) warning light will come on,
- an icon (2) will appear on the multifunction display along with a message,
- warning pictogram (3) lights up.

Visit your nearest RENAULT TRUCKS service centre.



## Parking brake

For safety reasons, make sure that the parking brake is correctly applied before leaving your seat.

When you park the vehicle:

- Make sure that the ground under your vehicle is flat and stable.
- Make sure that the vehicle is correctly parked (no risk of disturbing the traffic or safety risk for traffic, persons or surrounding facilities, following the highway code).

#### Loosening

Lift the locking pin and move the lever from position (2) to position (1). Warning pictogram (4) is no longer displayed.

#### **Application**

Move the lever from position (1) to positions (2) (past the hard point). Ensure that the lever is locked in position (2). Pictogram (4) is displayed.

Before leaving the vehicle, ensure the parking brake is fully effective by positioning the lever on "Test" (3).



Push the lever and move it from position (2) to position (3). This position releases trailer braking and the whole vehicle is immobilized by the rigid. This position ensures that the rigid alone can hold the whole vehicle immobilized.

As soon as the lever is released, it returns automatically to position (2), i.e. the parking position.

Push the lever and move it from position (2) to position (3). This position releases the trailer braking and the whole vehicle is immobilised by the tractor. This position serves to ensure that the tractor alone can hold the whole vehicle immobilized.

As soon as the lever is released, it returns automatically to position (2), i.e. the parking position.

## Moving away uphill

To move away more easily on hills, you can use the parking brake as far as the hard point, but not passing it. When the lever is released, it will return automatically to position (1).



When the driver's side door is opened or 5 seconds after the ignition is switched off, an audible warning and the appearance of an icon (2) and a message on the multifunction display will warn you that the parking brake has not been locked in place.



## Parking brake with safety (Scandinavian brakes)

## Loosening

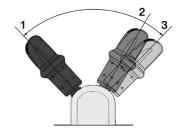
Lift the locking pin and move the lever from position (2) to position (1).

Pictogram (2) and associated text (3) inviting you to depress the brake or accelerator pedals appear on the multifunction information display.

Warning pictogram (1) is no longer displayed.

An icon (5) and a message advising you to press the brake or accelerator pedals will appear on the multifunction display.

Warning pictogram (4) is no longer displayed.





## **Emergency brake**

In the event of a service brake fault on one axle, the other axle provides emergency braking efficiency.

# Diesel Particulate Filter, general points



THE EXHAUST GASES EMITTED DURING THE MANUAL REGENERATION PROCEDURE PRESENT A RISK OF POISONING. PARK OUTSIDE OR IN A VENTILATED AREA ONLY.



Before starting static manual regeneration, it is essential to comply with the following recommendations:

- The vehicle should be parked outside, on a tarmac or gravel surface (surface with no risk of heat propagation or damage),
- Check to make sure that there are no flammable materials near the exhaust outlet,
- Ensure that the exhaust outlet is not directed towards objects or structures that could be damaged by high temperatures.



DURING AND AFTER MANUAL REGENERATION, STAY CLOSE TO THE STATIONARY VEHICLE TO MONITOR THE SMOOTH OPERATION OF THE WHOLE SYSTEM AND TO PREVENT ANY OBJECT OR PERSON APPROACHING THE EXHAUST UNTIL IT HAS COOLED COMPLETELY.

## Generalities

In order to protect human health and the environment, the Euro VI regulation imposes a new reduction in pollutant emissions.

A particulate filter is now mandatory.

A management strategy has been implemented for this particulate filter. It includes automatic regeneration when moving or manual when stationary, in order to eliminate the particulate matter collected.

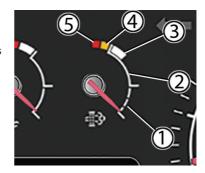
Long trips and short periods of idling favour automatic regeneration.

## Particulate filter clogging indicator

The clogging indicator indicates the saturation level of the particulate filter.

## Description of 5 indicator areas

- (1) Broken white zone: low saturation level, no action is required.
- (2) Nominal white area: automatic regeneration takes place without your intervention.
- (3) White zone: automatic regeneration could not start. If possible, adapt your driving style. Manual regeneration is possible.





After each workshop operation, check that the clogging indicator is in the nominal white zone (2) or the white zone (3). In this case, we recommend you perform manual regeneration in advance, to regain maximum range and thus prevent the risk of particulate filter clogging or even damage to the engine.

- (4) Orange zone: manual regeneration should be scheduled and performed in accordance with the information displayed on the instrument panel.
- (5) Red zone: manual regeneration is no longer possible; go to the RENAULT TRUCKS garage as soon as possible. If this action is not taken, a warning light will be displayed indicating that you should switch off the engine immediately: the particulate filter is irreparably damaged. A torque reduction phase will be applied.



If you ignore warnings concerning regeneration in zone 4 (white warning light, messages on instrument panel), a reduction in engine performance will be applied when the gauge reaches zone 5.

#### Switch

## Manual regeneration

Pressing the top of switch (1) activates manual regeneration.

## Automatic regeneration

Switch (1), in "AUTO", position, allows particulate filter regeneration to take place without your intervention.



## Stopping regeneration

Pressing the bottom of switch (1) stops a regeneration in progress or deactivates automatic regeneration.

## Dynamic regeneration operation

With the vehicle running, automatic regeneration starts as soon as the particulate filter reaches a high level of saturation and when all the conditions are met (vehicle speed, exhaust gas temperature, etc.).

If one of the conditions is no longer met, automatic regeneration stops. Once the conditions are again met, it starts again automatically.

You should therefore avoid interruptions as much as possible when regeneration is in progress, unless the idling period must exceed 3 minutes.

After regeneration, the particulate filter clogging indicator (1) goes back down to the discontinuous white zone (zone 1). Pictogram (2) is displayed if the vehicle speed is less than 10 km/h and above a certain temperature, and is extinguished if the speed is greater than 30 km/h or below a certain temperature of the particulate filter.



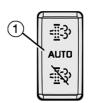


Automatic regeneration can continue in service for a few minutes during a short stop (stop sign, traffic lights, etc.), with the engine running.

## Regeneration interrupted or function deactivated

During regeneration, gases at very high temperatures are emitted via the exhaust. For safety reasons in a danger zone, if you are transporting dangerous goods, for example, you can deactivate the automatic mode. In this case, automatic regeneration cannot start and, if it is in progress, it is interrupted.

To stop regeneration, press the lower part of switch (1).





Deactivate the regeneration function when you are crossing a danger zone. If an automatic regeneration is in progress, it is interrupted.

If switch (1) is not reset to the **Auto** position, the regeneration function will remain deactivated even after restarting the vehicle.

Do not reactivate; the regeneration function will initiate a request for manual regeneration and can cause rapid clogging of the particulate filter.

A audio signal will sound and icon (3) will appear on the multifunctional display along with a message notifying you that regeneration is interrupted or deactivated.



## Manual regeneration operation

Conditions required to begin a regeneration:

- vehicle stationary.
- parking brake activated,
- ambient temperature below 35°C,
- gear selector in neutral,
- accelerator pedal released,
- power take-off(s) deactivated,
- engine temperature above 70°C,
- air suspension in the "road" position,
- long press, but less than five seconds, on the switch in "Auto" position.



A waiting time of 30 seconds is required between two manual regeneration requests.

Manual regeneration lasts about 1 hour in the above conditions.



If a manual regeneration in progress is interrupted, the system interprets this as a failure; the gauge rises instead of falling. It is therefore important to allow manual regenerations to complete with the engine speed returning to idle and the LEDs going out.

When particulate filter clogging indicator (4) reaches the white zone, "information" warning light (3) illuminates. An icon (3) and an associated message will appear on the multifunction display informing you that it is recommended to schedule a manual regeneration.





## PARK THE VEHICLE, MONITOR THE TRAFFIC CONDITIONS AND LEAVE THE ENGINE RUNNING.

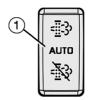


Keep a safe distance of two metres away from other vehicles, objects and all flammable material.



If the vehicle is used for short distances or with light loads, automatic regeneration may be insufficient; you may be requested to perform manual regeneration.

To activate regeneration, press and hold the top section of the regeneration switch (1) for less than 5 seconds; engine speed increases.



When regeneration is complete, "Information" warning light (3) goes out, then the engine returns to idling speed. The particulate filter gauge goes back down to a low level.



#### Manual regeneration impossible

If the conditions (described above) to initiate manual regeneration are not met, icon (3) and an associated message appear on the multifunction display telling you which condition is missing.





PARK THE VEHICLE, MONITOR THE TRAFFIC CONDITIONS AND LEAVE THE ENGINE RUNNING.



Keep a safe distance of two metres away from other vehicles, objects and all flammable material.

## Stopping regeneration

If the vehicle is required for an operation, you have the option of interrupting manual regeneration if it is in progress.

To stop regeneration, press the lower part of switch (1).

A audio signal will sound and icon (3) will appear on the multifunctional display along with a message notifying you that regeneration is interrupted or deactivated.







If a manual regeneration in progress is interrupted, the system interprets this as a failure; the gauge rises instead of falling. It is therefore important to allow manual regenerations to complete with the engine speed returning to idle and the LEDs going out.

## Clogged particulate filter

When particulate filter clogging indicator (4) reaches the red zone. "SERVICE" indicator (3) illuminates.

An icon (3) appears on the multifunction display and with a message informing you that you need to visit a RENAULT TRUCKS garage.

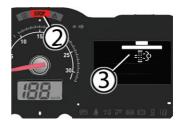


In this condition, a severe engine torque reduction phase will be applied.

In this case, it is imperative to stop the vehicle and contact the nearest RENAULT TRUCKS service point.

An icon (3) appears on the multifunctional display with an associated message informing you that there is a risk of the particle filter breaking.

In this condition, a severe engine torque reduction phase will be applied.



In this case, it is imperative to stop the vehicle and contact the nearest RENAULT TRUCKS service point.

## Particulate filter replacement

The "Service" indicator (2) comes on when the particle filter has reached an excessively high ash saturation level

The "Service" indicator (3) comes on when the particle filter has reached an excessively high ash saturation level.

Contact a RENAULT TRUCKS garage.





DIRECT CONTACT WITH OR INHALATION OF DIESEL PARTICULATE MATTER OR SOOT CAN RESULT IN SERIOUS INJURY OR DEATH. IF YOU HAVE TO CHANGE THE PARTICULATE FILTER FOR OPERATIONAL OR TECHNICAL REASONS, CONTACT A RENAULT TRUCKS GARAGE.

## Optidriver gearbox



Gearboxes are fitted with an oil pump for lubrication (for towing, refer to the Breakdowns - quick fixes section).

## Optidriver system

The Optidriver system determines then automatically engages a suitable gear ratio as a function of the vehicle load, road gradient, accelerator pedal position and whether or not the retarders are activated. It improves comfort and safety, reducing driver fatigue because they only need to concentrate on traffic conditions.

The Optidriver system may be used in two different ways: in integral automatic mode or in manual mode. It is strongly recommended to use it in integral automatic mode in order to benefit from optimised management of the driveline.

In the event of problems with system operation, you can use limp-home mode.

## First contact with Optidriver

#### Starting the vehicle

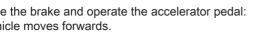
The Optidriver system is automatically in neutral. Start the engine.

With the parking brake engaged, move the line on ring (2) to opposite mark "D".

The starting gear is engaged.

Depress the brake pedal and release the parking brake.

Release the brake and operate the accelerator pedal: the vehicle moves forwards.





You are recommended not to modify the position of the accelerator pedal when changing gear.



The system refuses to engage gears which can lead to an engine overspeed or underspeed.



21DJ002535 202



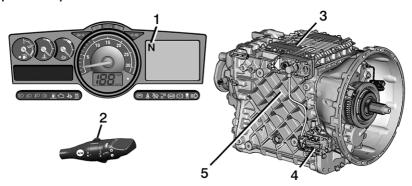
The vehicle may move with the parking brake applied, even if the throttle pedal is not activated; use the brake pedal to keep it immobile.

#### Stop

Place the line on gear selector ring (2) opposite the "N" mark to shift the gearbox into neutral and engage the parking brake before leaving the vehicle.



## **Description of Optidriver**



The Optidriver has 5 main components:

- a dedicated area on multifunction information display (1),
- a gear selector (2) with integral control unit,
- a speed control module (3) with integral control unit,
- a clutch control device (4),
- a mechanical crash gearbox (5).

#### Gear selector

Gear selector (1) can be moved in three directions for driving and has two rings for shifting into neutral and for "manoeuvring" mode:

## Ring (2): "N"/"D" positions

Position the ring to "N", the gearbox shifts to neutral.

Position the ring to "D", the gearbox engages the starting gear.



21DJ002535

## Ring (3): "C"/"R" positions ("manoeuvring" mode)

Toggle the ring to "C"; the gearbox engages the 1st forward gear and switches to manual mode.

Toggle the ring to "R"; the gearbox engages the 1st reverse gear and switches to manual mode.

Push the selector towards you once ("A/M") to return to "automatic" mode and exit "manoeuvring" mode.

#### Forwards (level with the steering wheel): "+" position

Corrects automatic driving mode by shifting into higher gears.

#### Back (level with the steering wheel): "-" position

Corrects automatic driving mode by shifting into lower gears.

#### Towards you (as when "flashing the headlights"): "A/M" position

Push the selector once to switch from automatic mode to permanent manual mode or vice versa.

## Starting the vehicle

Ring (2) on gear selector (1) in position "N".

Start the engine.

With the parking brake engaged, position ring (2) on gear selector (1) in position "D".



The starting gear is engaged.

Depress the brake pedal and release the parking brake.

Release the brake and operate the accelerator pedal: the vehicle moves forwards.



The vehicle may move with the parking brake applied, even if the throttle pedal is not activated; use the brake pedal to keep it immobile.

## Starting gear

Move ring (2) on gear selector (1) from "N" to "D".

In automatic mode, the system engages the optimum starting gear as a function of the vehicle load and the gradient of the road.



The starting gear can be changed but the use of an unsuitable higher gear could result in premature wear of the clutch. The gear selected by the gearbox can be corrected by up to two gearbox ratios; 5th gear is the highest gear that can be selected.

## Moving away uphill

Start the engine, the correct gear will be engaged on shifting into mode "D".

Depress the accelerator pedal.

The vehicle moves forwards.

## Starting downhill

Start the engine, the correct gear will be engaged on shifting into mode "D".

Release the parking brake.

The vehicle moves forwards (the clutch engages).



If you switch from mode "N" to mode "D" while the vehicle is moving forward, the system selects a gear ratio suitable for the speed at which the vehicle is moving and the clutch is engaged.



If you switch from mode "N" to mode "D" while the vehicle is moving in reverse, the system will slow the vehicle to a standstill to allow shifting to the forward starting gear.



It is not recommended to allow the vehicle to roll back with the gear selector in the neutral position.

## Changing into neutral

The gearbox automatically shifts into neutral position when switching the ignition off (engine stopped).

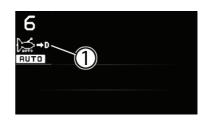




When driving at a speed of more than 100 km/h, shifting to neutral position is prohibited by the gearbox. The gearbox ratio remains engaged; an audible signal and indicator (1) prompt you to move the gear selector to position "D".

For obvious safety reasons, never drive with the gearbox in neutral and the gear selector in position "N", regardless of the vehicle speed, if the Optiroll "controlled free-wheel" function is not engaged.

Refer to the Optiroll section.



## Engine retarder

It is not necessary to deactivate the engine retarder when shifting gear. The system deactivates then reactivates it automatically at the end of each gear shift.

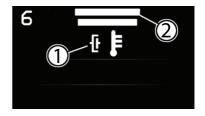
## **Clutch protection**

Any clutch overheating incident is reported by displaying warning pictogram (1) and associated message (2).

The gearbox downshifts automatically to 1st gear.

Excessive use of clutch slip is no longer possible.

- On acceleration the clutch is engaged, which could cause the engine to stall.
- If you release the accelerator during the slip phase, the clutch disengages.





If warning pictogram (1) is displayed during the clutch engagement phase and the vehicle is moving, continue to drive to cool the clutch.



If warning pictogram (1) is displayed during the clutch engagement phase and the vehicle is not moving, reduce the engine speed to idling and leave gear selector ring (2) on "D" until warning pictogram (1) goes out.





To prevent clutch wear:

- accelerate enough to start,
- use the starting gear selected automatically by the system or a lower gear.

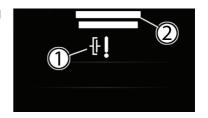


Never use the accelerator pedal to hold the vehicle immobile on a hill.

#### Worn clutch

In the case of clutch wear, indicator (1) and associated message (2) are displayed.

Visit your nearest RENAULT TRUCKS service centre.



## Overspeed protection

The system prevents the engagement of gear ratios that could result in overspeed.

## Dynamometer mode (2 wheels)

After installing the vehicle on the rollers.

With the vehicle stationary, engine running:

- move gear selector ring (2) from "N" to "D",
- fully depress the accelerator.



The engine will accelerate up to its maximum speed. After a few seconds, gear shifts will be made automatically.

The gearbox is now in its "dynamometer" mode.

#### Information:

- upshifting: the gears will shift 2 by 2 at approximately 1700 rpm,
- downshifting: on deceleration, the gears will shift at around 1,100 rpm.



Gear shifting is not optimised. The dynamometer mode does not permit fuel consumption measurements.

## Exiting dynamometer mode

Dynamometer mode is exited:

- once the vehicle front wheels are turning,
- 10 seconds after the ignition is switched off at the key.

The normal gear shift mode is restarted.

## Activation in low temperatures

In external temperatures below -20°C, let the engine run for 10 minutes to reach gearbox operating temperature.

## Integral automatic mode

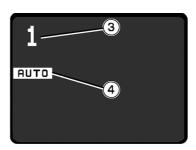
Whenever the engine has been started, when you move ring (2) on gear selector (1) from position "N" to position "D", suitable starting gear (3) and the information "Auto" (4) are displayed by default.

Shifting by one or more gears is performed automatically as a function of the accelerator pedal position.



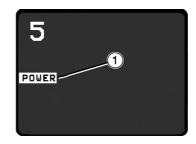
For upshifting, let the system manage the gear changes, even if you feel the engine speed seems too low.





#### "Power" function activation

When you wish to overtake and have more power in order to obtain maximum vehicle mobility, fully depress the accelerator pedal: the **"Power"** (1) message is displayed.





The "Power" function increases fuel consumption and should only be used in cases of absolute necessity.

#### Deactivating the "Power" function

Release the accelerator pedal slightly, the "Power" message (1) is no longer displayed.



The "Power" function will be overridden if the "Off-Road" function is activated (refer to the driving on difficult terrain section).

#### Use downhill

When slowing the vehicle (brake or retarder(s) actuated), if you are driving down a steep downhill route and the engine speed is high (close to engine overspeed) and the accelerator pedal is released completely, there is no automatic gear shifting; this allows the driver to maintain control of the vehicle speed. In this case, pictogram (1) is displayed, meaning that the vehicle must be slowed by increasing the braking force or using the retarder(s).





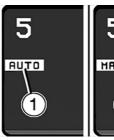
With the retarder(s) inactive and brake not applied, if you are running downhill, the system will automatically upshift in order to protect the engine from an overspeed and to optimise vehicle acceleration.



Depressing the accelerator pedal firmly would be interpreted as a request for maximum mobility and therefore have the undesirable result of shifting up several gears.

#### Permanent manual mode

To switch from automatic mode ("Auto" (1) message displayed) to permanent manual mode ("Manu" (2) message displayed) or vice-versa, push towards "A/M" on the selector lever. This can be switched with the vehicle stationary or being driven.







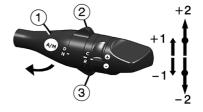
## Changing gear

Changing a single gear:

- to shift up or down a single gear, move gear selector (1) forwards (+) or backwards (-).

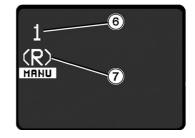
## Changing by two gears:

 to shift up or down two gears, move gear selector (1) forwards (+) or backwards (-) through the hard spot.





In the event of changing vehicle direction, the system can display the gear requested (7) in addition to the gear engaged (6).



21DJ002535



If there is a request to change direction, if the vehicle is not stopped within a period of 5 seconds, this request will be disregarded and the display of the requested gear will be cleared.

If the speed is above 10 km/h, the request will not be accepted and there will be no specific display.

In forward gear at low speed, or when stationary, reverse gear can be selected:

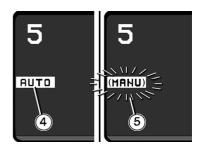
- bring the "R/C" selector ring to the "R" position.

In reverse gear at low speed, or when stationary, forward gear can be selected:

- move the "R/C" selector ring into position "C"; 1st gear shifts into manual mode,
- pull selector (1) towards you in the "A/M" direction; automatic mode is activated with the starting gear.

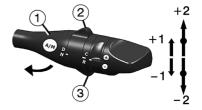
## Temporary manual mode

The vehicle is moving, you are in "Auto" mode, message (4) is displayed. If you wish to change the gear ratio engaged by the system in anticipation of a change in the road topography, you can shift up or down by one gear using selector (1), moving it to the (+) or (-) mark, without requesting manual mode. The "Manu" message (5) is displayed: you are in temporary manual mode.



There are several ways of returning to "Auto" mode:

- take your foot completely off the accelerator pedal and press it again,
- activate the "cruise control" function
- activate the retarder control "max" mode,
- move the selector to "A/M".





When the statutory road speed is reached or when the vehicle stops, the gearbox will be operating in automatic mode again.

## Manoeuvring mode

This mode allows shifting to 1<sup>st</sup> gear and reverse, while optimising fine management of the clutch when manoeuvring (drawing alongside loading bays, climbing kerbs, etc.).

#### Manoeuvres

## Selecting first gear

With the vehicle stationary, move line on the ring (3) on selector (1) to opposite mark "C".



## Shifting to reverse gear

With the vehicle stationary, move line on the ring (3) on selector (1) to opposite mark "R".

The system engages first reverse gear R1. With reverse engaged, move the selector backwards (–) to shift from R1 to R2 (or from R2 to R3) and forwards (+) to shift from R2 to R1 or from R3 to R2.

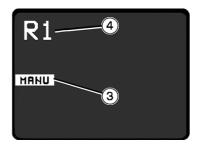


For preference start in R1.

Shifting from R1 to R2 can be done with the vehicle moving at a recommended engine speed greater than 1,000 rpm.

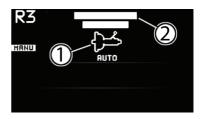


When reverse gear is selected, the "Manu" (3) and "R(x)" (4) information is displayed. Perform your manoeuvre and switch to integral automatic mode by positioning gear selector (1) to face the "AM" marking.



Rapid shifting to reverse R3 automatically causes warning pictogram (1) and associated message (2) to appear on the multifunction display.

They warn you of the possible risks of clutch wear in the case of unsuitable or over-frequent use.



21DJ002535



Fast reverse gear R3 must not be used for manoeuvring.

It can only be engaged when stationary.

Only to be used in exceptional situations requiring rapid movement in reverse.

The vehicle should only be moved in R3 on a flat road or on a downhill slope.

### Limp home mode (selector disconnected or broken)

You can go into gearbox neutral by applying the parking brake.

In automatic mode you can engage the starting gear by taking the parking brake off then depressing the brake pedal.

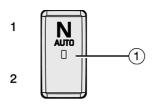
In both cases, go to the nearest RENAULT TRUCKS service point.

## Activating the "Automatic neutral" function

This function is only available on vehicles equipped with an automatic or automated manual gearbox and is used to shift the gearbox into neutral whenever the vehicle stops.

### Activating the function

Put switch (1) in position"1"; the indicator light illuminates. Stop the vehicle and keep the brake pedal depressed. When the vehicle has stopped, the gearbox automatically shifts into neutral.



During this phase, an icon (1) and a message (2) will appear on the multifunction display.

Release the brake pedal; the vehicle is held braked temporarily and the gearbox engages the appropriate gear. Start the vehicle by accelerating. The brakes will be automatically released when there is sufficient engine torque.





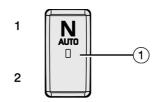
An audible signal sounds for 2 seconds before releasing the vehicle brakes if no action is engaged on the accelerator pedal.

The brakes are automatically released after action on switch (1).

To disable the function, set switch (1) to position "2"; the switch indicator light goes out.



Once the function has been selected by switch (1), it is active whenever the vehicle stops provided it is not disabled by pressing switch (1) again.



### Stop

Place the line on gear selector ring (2) opposite the "N" mark to shift the gearbox into neutral and engage the parking brake before leaving the vehicle.





When the engine is at rest and the gearbox is in neutral, it is impossible to change gear.

When you open the door to exit the vehicle while the selector ring is positioned at "D", an audible signal sounds and indicator (1) is displayed, prompting you to move the selector ring to position "N".



# Stopping and shutting down the vehicle

# Parking the vehicle

When the vehicle is completely immobilized, engage the parking brake, position ring (2) on gear selector (1) in position "N" and stop the engine with the ignition key.

### Retarder

Using the retarder means that it is possible to maintain a constant speed during descents and thus relieve the load on the service brake and retain its maximum efficiency in the event of emergency braking.

The other advantages of using the retarder are as follows:

- reducing brake lining wear.
- reducing brake overheating on the wheels.



Do not use the retarder on slippery surfaces. The retarder brakes only the driven wheels, which increases the risk of locking and skidding the wheels.

#### Use

While the retarder function is active, a blue sector (2) appears on the engine speed indicator on the tachometer. This blue sector indicates the maximum efficiency band of the retarder.

The retarder function is disabled in ABS and ESC phases.





Never let the engine speed reach the red zone (engine overspeed).

#### Manual mode

The control (1) located under the steering wheel activates the retarder.



An indicator (1) informs you of the position of the retarder control.

 Control with 3 active positions: this is used to actuate the exhaust brake and the "Optibrake" engine brake.

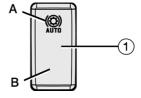


#### Activation of automatic mode

Move switch (1) to "A".

The retarder is coupled with the brake pedal (main brake).

Move switch (1) to "B" to return to manual mode.





Do not use the retarder function on slippery road surfaces. Deactivate automatic operation via switch (1).

The exhaust, engine and gearbox-mounted retarder function is active each time the brake pedal is actuated if the retarder control (1) is in position "0".



The retarder function is deactivated when the brake pedal is depressed for the first 5 times after the ignition is switched on.



The braking power is modulated as a function of the vehicle load and the pressure exerted on the brake pedal.

21DJ002535

Depending on the change in gradient, select the gear for descent using the gearbox combinations. To slow the vehicle speed, release the accelerator pedal and move control (1).



#### Position 0:

The feature is not active: indicator (1) and the rev counter blue sector (2) are not displayed.

Position 1 with action on the accelerator pedal:

The exhaust brake plus engine brake function is preselected but is not active: the blue sector on engine speed indicator (2) is illuminated.



- Position 1 without action on the accelerator pedal:

Above 900 rpm, the exhaust brake plus engine brake function is active at 50% of torque efficiency: indicator (1) and the blue sector on engine speed indicator (2) are illuminated.

Position 2 with action on the accelerator pedal:

The exhaust brake plus engine brake function is preselected but is not active: the blue sector on engine speed indicator (2) is illuminated.

Position 2 without action on the accelerator pedal:

Above 900 rpm, the exhaust brake plus engine brake function is active at 100% of torque efficiency: indicator (1) and the blue sector on engine speed indicator (2) are illuminated.

Position 3 ("MAX" mode activated) with action on the accelerator pedal:

The exhaust brake plus engine brake function is preselected but is not active: the blue sector on engine speed indicator (2) is illuminated.

- Position 3 ("MAX" mode activated) without action on the accelerator pedal:

Above 900 rpm, the exhaust brake plus engine brake function is active at 100% of the maximum torque possible: indicator (1) and the blue sector on engine speed indicator (2) are illuminated.

## Retarder



This blue sector indicates the maximum efficiency band of the retarder.

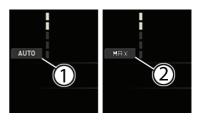


Never let the engine speed reach the red zone (engine overspeed).

#### "MAX" mode

The engagement of "MAX" mode controls downshifting of the Optidriver gearbox, enabling the engine speed to be raised and thus increasing deceleration.

With the gearbox in "AUTO" mode (1), move the retarder control to unstable position 5 to engage "MAX" mode.



- From 1<sup>st</sup> to 7<sup>th</sup> gear, downshifting is done gradually.
- From 8<sup>th</sup> to 12<sup>th</sup> several gears can be downshifted simultaneously. Indicator pictogram (2) is displayed.

# Changes on difficult terrain

Speed changes on difficult terrain should be slow, to allow for proper analysis of upcoming topography. Cab comfort must not make you forget that these are 12- or 14-tonne heavyweights moving on very difficult terrain.

# Locking differentials

The differential lock forces the drive wheels on the same axle to rotate at the same speed. Sometimes the differential lock is required in order to maintain traction when driving in road slippery conditions (for example, ice, sand, mud). Only use the differential lock at low speeds and without turning the truck.

Note that differential locks make steering more difficult, and the vehicle does not react as fast to changes in direction.

You should only engage the differential locks when the grip conditions require it (risk of breaking axles and accidents).

Locks should be disabled as soon as possible, in the reverse order to engagement.

# "Rear drive axle(s)" inter-wheel differential lock

Do not use:

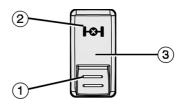
- on good grip surfaces (highway, dry or rocky terrain),
- on bends:
- when the vehicle is fitted with a non-skid device (chains etc.).

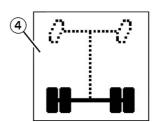
Double locking switch, refer to **Driving position** section.

# **Engagement**

# Differential lock management with EBS assistance

On surfaces with low levels of grip or when approaching a slippery section of the roadway (while driving, without altering your driving speed, at a vehicle speed below 30 km/h), unlock via button (1) then press top (2) of switch (3); pictogram (4) is displayed once the differential lock is engaged.





# Driving on difficult terrain

### Disengagement

Press switch (3). Indicator pictogram (4) should no longer be displayed. If it is, driving very slowly, turn slightly to the left and to the right going through a straight line to disengage the dog clutch and make the pictogram(s) disappear.



The inter-wheel differential lock is disengaged automatically as soon as vehicle speed is above 30 km/h

When the speed falls back below 25 km/h, it re-engages automatically.

# "ASR" Anti-slip regulation system

When you move away or under acceleration, this system prevents the wheels from slipping, whatever the condition of the road surface.

This function is activated:

- if a wheel slips, this wheel is braked to bring its speed into line with that of the opposite wheel;
- if two wheels slip, engine speed is limited then the slipping wheel is braked to bring its speed into line with that of the wheel opposite.

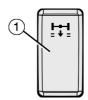
#### On the road

During operation of the ASR system, indicator pictogram (1) flashes.



#### "ASR" off-road mode

Activate off-road mode if you have to drive on very uneven or slippery surfaces. Press switch (1).



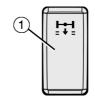
In this mode, ASR allows more wheel slip of the drive wheels, which can improve traction in certain conditions (loose ground, mud etc.). It is not recommended to activate it on the road.



# Deactivating the function

Press switch (1) for more than 5 seconds. Pictogram (2) lights up and pictogram (3) appears on the multifunction display.

The ASR must be deactivated off-road, in difficult terrain, when off-road mode proves inadequate.



# Exiting off-road mode or re-activating the function

- On switching off the ignition.
- By pressing switch (1).



The "DTC" (trajectory control) and "ESC" (roll-over prevention) systems remain active even after deactivation of the "ASR" system or going into off-road mode. However, the trajectory control is wider-focused to permit the vehicle to drift further before the "ESC" system is activated.

# Driving on difficult terrain with the Optidriver gearbox

Activation of this driving mode on difficult terrain allows a starting gear lower than that selected for road use. This starting gear adaptation is active in manual and automatic modes.

The goal is to preserve the clutch and improve manoeuvrability when operating on difficult terrain.

In automatic mode, the gear shift strategies are modified to allow slightly higher engine speeds to be reached and therefore engine performance is improved. This results in less gear shifts.

To activate this mode, put the switch in position "A"; the switch indicator light illuminates. Warning pictogram (1) and an associated message appear on the multifunction information display.

To deactivate this mode, put the switch in position "B"; the switch indicator light is extinguished.

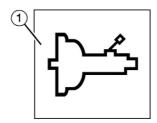




The gearbox "Power" mode is disabled in "Off road" mode.



Ensure that the switch is not left in position "A" for road use as this would result in a slight increase in fuel consumption.



## Changing gear

This mode does not permit shifting two gears at the same time but a request for successive gear shifts will be taken into account.

In "Auto" mode, if the vehicle has a high engine speed and the accelerator pedal, the brake pedal and the retarder control are fully released, the gearbox will not shift gear automatically.

# Manual acceleration on difficult terrain with Optidriver gearbox

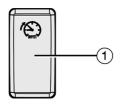
This function is used to extract the vehicle from difficult terrain if it is stuck in the mud; i.e.: by stabilising engine speed (and therefore vehicle speed) on difficult terrain.



This function is not valid if a power take-off is engaged.

### Activating the function

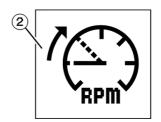
With the vehicle running at a speed of less than 20 km/h, press switch (1); the gearbox automatically switches to manual mode.



Warning pictogram (2) and an associated message appear on the multifunction information display.



If the engine speed is below 600 rpm at the moment of activation of the function, a message on the multifunction information display will prompt you accelerate to reach that threshold, otherwise activation will fail.



It is then possible to shift up or down gears.

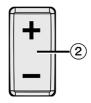


Avoid shifting gear at high engine speeds.

It is possible to modify the engine speed with switch (2) or the accelerator pedal:

- Change the engine speed by pressing the "+" or "-" on the switch (2)
- use the accelerator pedal to modify the engine speed.

Press "+" or "-" on switch (2) then release the accelerator pedal to store the engine speed.





If the rolling resistance of your vehicle becomes greater than the engine torque, the engine speed will drop; the function will be inhibited to allow the clutch to open.

Then simply accelerate until you reach 600 rpm to restore the function.

# Driving on difficult terrain

# **Function standby**

The function is deactivated automatically:

- by action on the brake pedal;
- if the vehicle exceeds 21 km/h.

# Deactivating the function

Press on the switch (1), and the gearbox will stay in manual mode to switch back into automatic mode; push once towards "A/M" on the gear selector.



# **Engine stop**

Apply the parking brake and put the gearbox in neutral. Always wait for the engine to return to idling speed before switching off.

To stop the engine, switch off the ignition.

Switch off the power via the master switch. To avoid damage to the alternator and the vehicle electronic components, never switch off the power via the master switch before stopping the engine.



After heavy-duty use (climbing a hill, etc.), allow the engine to idle for 1 minute before switching it off.

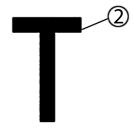


When the engine is stopped, an AdBlue circuit drain cycle is performed automatically. During this operation, the pump can be heard operating.

### **Tachograph**

If the tachograph printer drawer is left open when switching off the ignition, an audible signal sounds and a warning icon (2) and its associated message will appear on the multifunction information display.

Close the tachograph printer drawer again.





If the vehicle is to be laid up for a prolonged period of time (more than ten days), disconnect the circuit by removing the fuse (F68 - F98) to avoid discharging the batteries through the tachograph.

If working on the vehicle, engine running, after tilting the cab, you can stop the engine by pressing on the button (1).



# Air suspension

### Electronic air suspension

This is pneumatic suspension that is pilot-controlled by an electronic system. In addition to the benefits of conventional air suspension, it has the following advantages:

- Optimisation of loading and unloading bay services and last level stored in the memory (even after the current is switched off);
- Automatic level correction parallel to the vehicle axis (even in the event of uneven load distribution);
- functions controlled by a remote control unit;
- Reduced number of air hoses:
- Level correction is guick with low air consumption;
- Built-in safety systems (alarm, defect mode procedures);
- Programming according to the vehicle and to different legislation;
- At speeds above 10 km/h, the chassis returns to normal level.

#### Operations

#### Automatic mode

The system always adjusts the suspension to the normal level defined by programming.

#### Manual mode

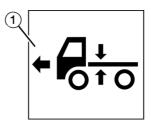
By programming, operation in manual mode is only possible below 10 km/h. Manual mode allows the chassis height to be positioned to the level required. Automatic mode is resumed via the (normal level) button on the remote control unit or when the speed is above 10 km/h.

# Information tell-tale (1)

 This is displayed as soon as the vehicle level is other than normal

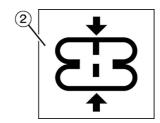
#### On the road

pictogram (1) and the message "NOT IN DRIVE POSITION" appear on the multifunction information display warning of a suspension fault.



# Warning tell-tale (2)

 It is displayed with the message "SWITCH OFF IGNITION" and the "SERVICE" indicator as soon as a fault is identified. The ECU safety function automatically neutralises the control system partially or completely.



# When stationary

Displaying pictogram (2) indicates a suspension fault. Carry out a test (refer to the **Test operation** section).

### Restarting

When starting the vehicle, the suspension height is only taken into account when the parking brake is released.

### Remote control unit

There is a corresponding ECU type for each suspension equipment.

Location of remote control (1) inside the cab.



# Vehicle with adjustable rear suspension

The remote control can be used to raise or lower the rear suspension and return the vehicle to the road position.

The remote control is operational if:

- the ignition is on;
- air pressure is greater than 8 bar;
- speed is less than 10 km/h.

#### Control buttons:

- (1) "STOP" control button.
- (2) "Standby/ride height memory" control button.
- (3) "Return to ride height" control button.
- (4) "Raise" control button.
- (5) "Lower" control button.
- (6) "Memory store/recall" control button.

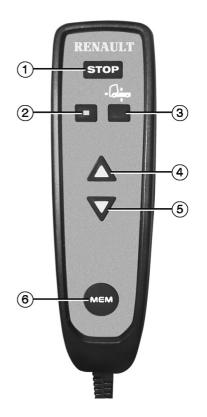
#### Using the remote control box

Activate the electronic boxes or the master switch.

Switch on the ignition (if the air pressure is inadequate, start the engine).

#### "Raise" function

To raise the suspension, press control button (4). When the suspension has reached its upper stop, the system no longer takes account of the control (4). Pressing and holding control button (4) raises the suspension continuously.



#### "Lower" function

To lower the suspension, press control button (5). When the suspension has reached its lower stop, the system no longer takes account of control button (5). Pressing and holding control button (5) lowers the suspension continuously.

# Memorize a loading bay level

To memorise a loading bay level, it must first have been set using control buttons (4) and (5).

Once the required height is reached, press button (6) for at least 5 seconds, then release it.

The required height is stored in memory.

To recall this height, simply press button (6) for at least 2 seconds, but less than 5 seconds.

### Return to ride height

To recall the ride height, press control button (3).

#### Stop

"Stop" control (1) is used to interrupt the operation when the required height is reached.



In the event of danger, it is possible to stop all movement immediately by pressing control button (1).



If the electronic system estimates the speed of movement as too fast, it limits it by cutting the air flow

### Standby

Hold control button (2) down and switch off the ignition. During this phase, the chassis position may change.

The suspension position remains stabilized for 1 hour(s). The suspension height can also be adjusted by means of the raise/lower control button (4) - (5). The function remains operational for as long as there is sufficient air pressure inside the reservoirs.

# Storing a ride height that is different to the factory default height

To store a new ride height, press and hold control button (2) throughout the operation.



During this phase, the chassis returns automatically to somewhere near the factory driving level.

Set the new height using controls (4) and (5). The maximum and minimum ride height adjustment values are limited by the electronic system. When these limits are reached, the system no longer takes account of control buttons (4) and (5).

Once the required height is reached, press control button (6) for at least 5 seconds, then release it.

Then release control button (2).

The required height is stored in memory.

To check that the new level has been taken into account, press control button (3).

### Recalling the default ride height

Press control buttons (2) and (6) simultaneously for at least 2 seconds but less than 5 seconds.

First release control button (6) then release control button (2).

The default ride height is recalled.



If your vehicle has a gross combination weight (GCW) of 60 tonnes, the parking brake also operates on the front axle in addition to the drive axle.

When adjusting the suspension, the front axle brake is released to avoid generating mechanical stresses.

Before operating the suspension, check to make sure that there is no risk of the vehicle moving.

# **Test operation**

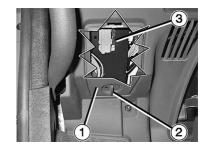
Switch off and re-engage the master switch (10 seconds interruption).

If warning pictogram (2) is displayed again with the message "SWITCH OFF IGNITION" and the "SERVICE" indicator, contact the nearest RENAULT TRUCKS garage.

Drive at a low speed (20 km/h maximum) and take extra care, maintaining safety distances.

If warning pictogram (2) goes out, the minor fault is deleted. Nevertheless, contact your RENAULT TRUCKS garage.

Fault finding and maintenance are to be carried out using the RENAULT TRUCKS test tool plugged into diagnostic socket (3).



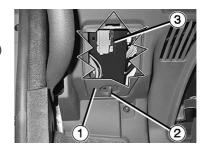
# Diagnostic and Infomax "OBD" socket

"OBD" diagnostic socket (3) is positioned under the switches, to the left of the instrument panel.

To access "OBD" diagnostic socket (3), open cover (1) by turning catch (2) through ¼ of a turn.

Depending on your vehicle's equipment

"OBD" diagnostic socket (3) is also used as the Infomax connection.



#### Power take-off

The power take-off is usually a hydraulic pump driven by the engine or gearbox. The power take-off is mounted on the engine, the flywheel or the gearbox. A power take-off connected to the flywheel or engine is called a clutch-independent power take-off. The body builder adapts normal control of the power take-off for your particular equipment.

There are two possible applications (when stationary and when driving).

# **Engagement**

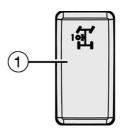
- Vehicle started (green "active propulsion system" light on steady),
- Gear selector in neutral,
- parking brake activated.

# Use when stationary

- Engine speed < 700 rpm.
- Ring (2) on gear selector in position "N" (gearbox in neutral).
- Parking brake applied.
- Vehicle speed zero.

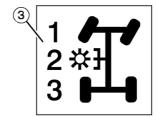


Press and hold the switch (1).



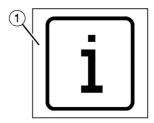
When pictogram (3) and its associated message appear on the multifunction information display, release the switch.

From this point, the power take-off is engaged.



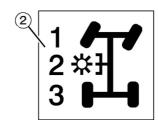
## Missing condition(s)

The appearance of the warning light (1) and its associated message on the multifunction information display tell you that there is a condition missing for the engagement of the power take-off.



Pictogram (2) disappears, revealing pictogram (3). It reports on the power take-off(s) engaged and their speed.

The icon (3) will disappear, replaced by (4). It reports on the power take-off(s) engaged and their speed





### Two operating speeds for the power take-off

On engagement, the power take-off is at "min" speed. Go through the gearbox control selector to change the speed:

- parallel to the steering wheel, move the selector forwards (+): "max" speed,
- parallel to the steering wheel, move the selector backwards (-): "min" speed,







### Use when driving



Function to be activated at the dealership or by the bodybuilder using the RENAULT TRUCKS bodybuilder test tool

The power take-off is engaged while the vehicle is stationary.

See previous pages.





With the vehicle stationary, engage a gear ratio appropriate for use (only the first six gears are possible).

The rotational speed of the power take-off depends on the gear engaged.

Gears 1, 3, or 5: power take-off minimum speed (3).

Gears 2, 4, or 6: power take-off maximum speed (4).

Depress the accelerator pedal to start the vehicle: the power take-off begins to rotate.



It is not possible to shift gear.



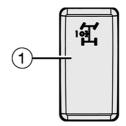
When using a power take-off while driving, the cruise control function will be deactivated for safety reasons. The accelerator pedal can be used to alter the engine speed.

### Power take-off disengagement

Always remember to disengage the power take-off before switching off your engine.

The power take-off is disengaged by:

<UL><LI>one press on the switch (1);</LI><LI>returning the gearbox to neutral (ring (2) on "N");</LI>ignition switched off;</LI><LI>engine stalling.</LI></UL>





If your vehicle is fitted with these, only perform emergency stops when absolutely necessary. A forced stop can damage mechanical parts which can lead to serious faults or even accidents.



Some power take-off engagement/disengagement and engine speed regulation conditions can be modified using the RENAULT TRUCKS body builder software.



Ensure that the equipment installed on the vehicle is no longer in the operating position and poses no risk to users or people nearby.

# Speed of rotation

If driving a hydraulic pump, do not exceed the speed of rotation stipulated by the equipment manufacturer.

# External equipment - control/management

The minimum engine speed is limited to 600 rpm, the maximum engine speed limited to 1,500 rpm and the rated engine speed set at 1,000 rpm ex works with the fast idling device activated.

See chapter **Driving**.

The speeds of rotation are provided as a guideline and are subject to modification without prior warning.

Depending on the equipment installed by the equipment manufacturer, the engine speed and some engagement conditions can be modified using the RENAULT TRUCKS bodybuilder test tool.

#### Power take-off speed of rotation

For an engine speed of 1,000 rpm.

Splitter set to low range (minimum power take-off speed): gearbox neutral, 1<sup>st</sup>, 3<sup>rd</sup> or 5<sup>th</sup> gear.

- S81: 705/880 rpm.
- S84: 910/1140 **rpm**.
- PTRD-D1D: 600/760 rpm.

Splitter set to high range (maximum power take-off speed): gearbox neutral, 2<sup>nd</sup>, 4<sup>th</sup> or 6<sup>th</sup> gear.

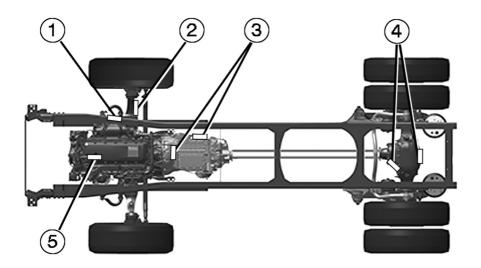
- S81: 897/1100 **rpm**.
- S84: 1159/1420 rpm.
- PTRD-D1D: 770/950 rpm.



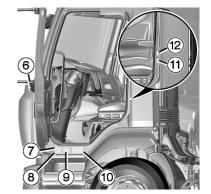
Servicing and maintenance

# Vehicle identification

Identification plates are attached to the main parts of your vehicle.



- (1) Chassis
- (2) Axle
- (3) Gearbox
- (4) Drive axle(s)
- (5) Engine
- (6) CAM reference sticker
  - Paint code
  - Manufacturing number
- (7) RTMD-ADR plate
- (8) ABS plate
- (9) Conformity plate
- (10) Manufacturer's plate
- (11) Tachograph sticker
- (12) Speed limitation sticker



# Day-to-day maintenance

Some simple maintenance jobs can be performed by the driver. If a lamp has failed, this may even be essential for legal and safety reasons.

Sometimes, it is necessary to replace a bulb to make sure that you can see and be seen on the road. When working with lamps, be careful to avoid any risk of injury, and to preserve the material quality.

Always replace a bulb with an identical bulb.

#### **Bulbs**

If replacing a bulb, always replace it with a bulb of the same rating and type.

Depending on your vehicle's equipment

#### Table of bulbs

Assignment	Power
Front parking lights	5 <b>W</b>
Side parking lights	3 <b>W</b>
Rear parking lights	2x5 <b>W</b>
Front direction indicator lights	21 <b>W</b>
Side flashing lights	21 <b>W</b>
Rear direction indicator lights	21 <b>W</b>
Halogen dipped beam headlights	70 <b>W</b>
Daytime headlamps/Driving headlamps	20 / 60 <b>W</b>
Outline lights	5 <b>W</b>
Registration plate light	10 <b>W</b>
Stop lights	21 <b>W</b>
Fog light(s)	21 <b>W</b>
Reversing light(s)	21 <b>W</b>
Foot board lighting	5 <b>W</b>
Cab overhead lights	21 <b>W</b>
Bunk overhead lights	21 <b>W</b>

# Day-to-day maintenance

Reading light	10 <b>W</b>
Work lamps (tractor)	21 <b>W</b>
Work lamps (tractor)	70 <b>W</b>

# Changing a bulb

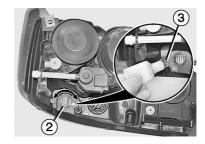
To access the bulbs, unscrew screw (1) and tilt the headlamp unit assembly outwards.



# Front parking lights

Turn socket (2) anticlockwise as far as the stop, then pull it out.

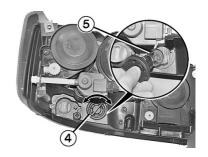
Replace bulb (3).



# Front direction indicator lights

Turn socket (4) anticlockwise as far as the stop, then pull it out.

Replace bulb (5).

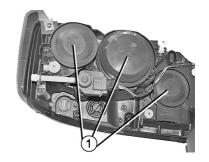


# Headlights

Remove rubber blanking plugs (1).



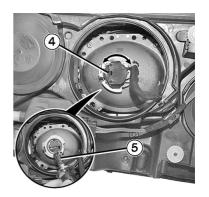
When changing a bulb, carefully replace the blanking plate in order to provide a perfect seal for the lamp.



## Dipped beam headlights

Turn socket (4) anticlockwise as far as the stop, then pull it out.

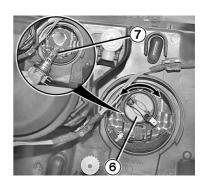
Replace bulb (5).



# Daytime headlamps and "DRL"

Turn socket (6) anticlockwise as far as the stop, then pull it out.

Replace bulb (7).



## Halogen bulbs

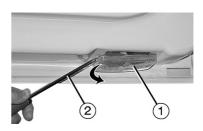


When installing these bulbs, it is recommended to hold them by their metal end. If they must be held by the glass section, use a cloth or clean paper. The lightest fingerprint or trace of grease could render the bulb unusable when the light is switched on. Before installation, you can clean the bulb using rubbing alcohol if you are not certain that it is clean. Before removing a bulb, leave it to cool for a few minutes if it has been lit, otherwise there is a risk of serious burns.



# Courtesy lighting (foot board)

Unclip light (1) using a flat screwdriver (2).



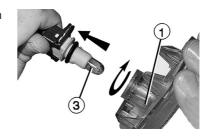
Remove light (1) from the door.



Turn bulb holder anticlockwise as far as the stop, then pull it out from light (1).

Replace bulb (3).

Clip light (1) back in.



## Replacing a bulb on the side indicator lights

Unscrew anchorage screws and release light (1).

Turn connector/bulb holder assembly (2) through one quarter of a turn and extract the bulb.

Replace the bulb and refit in the reverse order of removal.

### Replacing rear light bulb(s)

Unscrew screw (1) and extract the diffuser to access the bulbs.

- (2) Side light
- (3) Direction indicator
- (4) Reversing light
- (5) Side light
- (6) Stop light
- (7) Fog light
- (8) Registration plate lighting







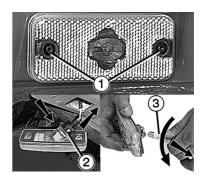
# Replacing side light bulb(s)

Remove anchorage screws (1) and release light.

Unclip connector (2).

Turn bulb-holder through 1/4 of a turn and remove (3).

Replace the bulb and refit in the reverse order of removal.





# Changing bulb(s) on end-outline marker lamps on the roof

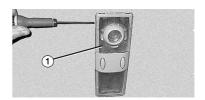
Turn bulb-holder through 1/4 of a turn and remove (1). Replace the bulb and refit in the reverse order of removal.





### Replacing a reading lamp bulb

Unclip cover glass (1) using a flat screwdriver to access the bulb.



# Replacing an overhead light bulb

Unclip the cover glass concerned using a flat screwdriver to access the bulb.



# Use the dipped beam headlights in accordance with the applicable highway code

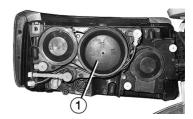
When you drive in a country where traffic drives on the opposite side of the road compared to your country, your asymmetric dipped beam lights can dazzle drivers coming towards you.

In order to avoid this, the headlamp is fitted with a system for modifying the light beam emitted.

To access the settings, unscrew screws (1) and pull on the headlamp insert.



Remove blanking piece (1).

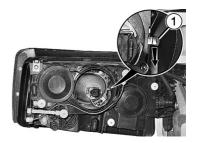


Manoeuvre lever (1) to modify the beam emitted.



There is a risk of burns when working on a headlamp that has just been in operation.

Use suitable protective equipment.

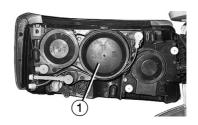




Do not forget to move lever (1) back to its original position when you leave the country.



When carrying out work on the headlamp which required removal of blanking piece (1), refit it carefully to ensure that the headlamp unit is sealed perfectly.





It is strictly prohibited to apply adhesive tape to the headlamp as this could quickly become damaged under the effects of heat.

# **Fuses**

To gain access to the fuses:

- Turn the two locks (2) through 1/4 of a turn.
- Remove the cover (1).

After the operation, refit cover (1) and turn locks (2) through  $\frac{1}{4}$  of a turn.



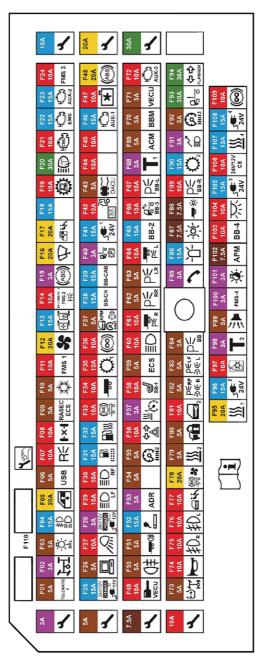
Replace the fuses using fuse grip (3).



Always replace a fuse with another fuse of the same rating.

Depending on your vehicle's equipment

### Fuse panel on electrical distribution box



# Day-to-day maintenance

Assignment	(F) Marks	Amperag e
Telematics	F01	5
Power take-off	F02	3
Daytime running lights (DRL)	F03	5
Fog driving lights	F04	15
Long range headlights	F04	15
Front window lift motors	F05	20
Not used	F06	20
Reversing light(s)	F07	10
Differential lock	F08	10
Suspension ECU	F09	5
Electronic steering axle ECU	F09	5
Air conditioning	F10	5
Onboard management	F11	10
Air heater (ventilation)	F12	20
Swivelling defrosting rear-view mirrors	F13	15
Telematics		
Onboard management	F14	10
Reversing light(s)	F14	10
Reversing buzzer		
"EBS" ECU	F15	3
Windscreen wiper motor	F16	20
Not used	F17	20
Rear window lift motor (4-door cab)	F1/	20
Not used	F18	15

Assignment	(F) Marks	Amperag e
Automatic gearbox diagnostic socket	F19	10
Headlamp washer pump	F20	30
Not used	F21	10
Engine management ECU	F22	15
Actuator on variable geometry turbo	F23	15
Onboard management	F24	10
Radio		
12V socket	F25	15
24V/12V step-down transformer in dashboard		
Diagnostic socket (OBD)	F26	5
Work light	F27	10
Radio		
Accessories		
12V socket	F28	3
24V/12V step-down transformer in dashboard		
Telematics		
Main beam headlight, LH	F29	10
Main beam headlight, RH	F30	10
Fuel primary filter heater	F31	15
Fuel heater	F32	20
Trailer "ABS/EBS" socket	F33	10
Trailer socket	F34	10
Gearbox	F35	10
Retarder	F36	10

# Day-to-day maintenance

Assignment	(F) Marks	Amperag e
Transponder		
Information display		
Central air management (ancillaries, service, etc.)	F37	5
Alarm	137	3
Central locking		
Particulate filter regeneration control (Euro VI)		
Customer pre-arrangements on chassis	F38	15
Customer pre-arrangements on cab	F39	15
Cab tilting	F40	3
Bodybuilder information (parking brake engaged)	140	3
24V socket on overhead ledge	F41	15
Roof hatch	F42	10
"DACU": Driving assistance control unit	F43	5
Not used	F44	10
Not used	F45	10
"EGR" solenoid valve	F46	15
Selector for manual gearbox	140	15
Engine fan	F47	10
"EBS" ECU	F48	20
Key switch		
Transponder	F49	10
Vehicle control unit "VECU"		
Fog light(s)	F50	5
Trailer fog light(s)	F51	5

Assignment	(F) Marks	Amperag e
Cigarette lighter	F52	15
ADR supply (alternator and master switch)	F53	3
Not used	F54	5
Information display	F55	5
Flasher unit	F56	10
Hazard signal control	F30	10
Hours counter	F57	2
Independent heating	F5/	3
Heated seat		
Seat belt not fastened warning	F58	10
Bodybuilder pre-arrangement (engine running)		
Suspension ECU	F59	5
Additional main beam headlights	F60	10
Trailer RH parking lights	F61	10
RH rear parking lights	F62	5
LH rear parking lights	F63	5
Trailer LH parking lights	F64	10
Customer pre-arrangements	F65	15
Bodybuilder pre-arrangements (van lighting, machine control)	F66	10
Bodybuilder pre-arrangement (LH marker lights)	F67	10
Tachograph	F68	3
Pollution control management control unit	F69	5
Bodybuilder unit power supply (BBM)	F70	5
Vehicle control unit "VECU"	F71	5

# Day-to-day maintenance

Assignment	(F) Marks	Amperag e	
Engine preheating	F72	10	
Tyre pressure check	- F73	5	
Electronic steering axle ECU	173	3	
Warning buzzer	F74	10	
Fog driving light, RH	F75	10	
Fog driving light, LH	F76	10	
Not used	- F77	10	
Rear door central locking (4-door cab)		10	
Trailer "ABS/EBS" socket	F78	20	
Parking heater control	F79	5	
Central locking	F80	5	
Central door locking	F81	10	
RH front parking lights	F82	5	
LH front parking lights	F83	5	
Bodybuilder pre-arrangement (marker lights)	F84	5	
Telephone	F85	3	
Rotating beacons	F86	15	
Stop lights	F87	7.5	
Trailer stop lights	F88	7.5	
Bodybuilder pre-arrangement (RH marker lights)	F89	10	
Gearbox computer	F90	15	
Lights lighting control	F91	3	
Information display	F92	5	
Cab tilting	F93	30	

Assignment	(F) Marks	Amperag e
Flasher unit	F94	30
Independent heating	F95	20
24 V sockets	F96	15
24V / 12V step-down transformer	F90	15
Refrigerator	F97	10
Tachograph (ADR)	F98	3
Alarm	F99	5
Onboard management	F100	3
"Dashboard" lighting rheostat	F101	3
Air production management (APM)	F102	7.5
Cab pre-arrangements	F103	10
Cab lighting	F104	10
24V socket on overhead ledge	F105	15
24V/12V step-down transformer in overhead ledge	F106	10
CB pre-arrangement	F 100	10
Parking heater	F107	15
24V socket on dashboard	F108	15
Hydraulic retarder	F109	10

# Front windscreen wiper blades

# Replacing a windscreen wiper blade

Lift the windscreen wiper arm.

Remove windscreen wash pipe (2).

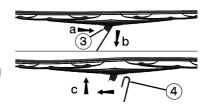
Tilt blade (1) until horizontal.



# Day-to-day maintenance

- a Pull on tab (2).
- **b** Pull blade (1).
- c Release hook (3).

To install, proceed in the reverse order to removal and ensure that tab (2) is secured.



# Warranty

The maintenance instructions contain information on the preventive operations that the driver should perform to keep a vehicle reliable and safe.

However, the servicing described in these instructions does not cover everything.

Numerous points are included in the services provided by the RENAULT TRUCKS garages.

When purchasing a vehicle, a service programme is set up. The programme is based in particular on the type of wagon and its use in transport applications, the driving conditions, oil grades, environment and legislation in force in each country.

These are all unique factors for each vehicle. Therefore, we recommend that you contact the RENAULT TRUCKS network to optimise maintenance.

Usage depends on several criteria including the type of vehicle for the transport mission, vehicle use, environment, regulations, all creating a specific usage for each vehicle.

If the initial conditions necessary for setting up the servicing programme are modified, the programme should be corrected. Contact your RENAULT TRUCKS garage.

### Servicing is the prime guarantee

The tougher the operating conditions, the shorter the service and inspection intervals. In some cases, it is necessary to take account of hours of operation rather than mileage. The manufacturer cannot be held liable for incidents resulting from driving errors or failure to observe the instructions contained in this handbook, particularly if lubricants not meeting the performance level required are used for lubrication.

For all maintenance operations, consult a RENAULT TRUCKS garage.

### Topping up engine oil



Top up the engine oil with RENAULT TRUCKS OIL RLD-3 grade oil until the first engine oil change is reached. Subsequently, the choice of oil to use is defined depending on your vehicle use.

The implementation of these operations is essential for the validity of the vehicle warranty.

To benefit from this, consult a RENAULT TRUCKS garage and give them the warranty certificate you received when the vehicle was delivered.

#### Lubrication

The manufacturer defines the lubricant performance level necessary for the smooth functioning of the vehicles he manufactures. The manufacturer also defines the frequency of the lubrication operations.

# These recommendations must be strictly followed.

Observing them will increase the service life of the equipment and components. Failure to comply can invalidate the warranty offered.



Draining major units: always drain oil on level ground, with the oil hot to improve the flow. When refitting drain plugs, fit new seals.

### Checking the oil levels (all major units)

Oil levels must always be checked in identical conditions (vehicle unladen or laden), on flat ground, and at least 5 minutes after the vehicle has stopped.



Engine oil level: for a more accurate reading, the engine oil level should be checked when the engine is cold, after a prolonged shut-down (2 hours minimum), in the morning, prior to start-up, for example; otherwise, check the oil level with the dipstick.

- Vehicle with mechanical suspension: check the level with the vehicle unladen.

#### Vehicle road tests

After the warranty inspection, the vehicle manufacturer should make sure that the user clearly understands all the operating instructions in the handbook.

### **Fuel**

#### Diesel

The quality of fuel is important for the technical and environmental performances of the vehicle.

Poor quality fuel will affect the durability of the engine and may result in the vehicle not meeting engine emissions control standards.

Fuel quality is very important for vehicles equipped with particulate filters (EATS) and the exhaust gas recirculation system (EGR), it is therefore important to use a fuel that complies with national and international standards.

The European EN 590 standard must be complied with, it comprises the legal requirements for fuel stipulated in directive 98/70/EC and for EU fuels (2009/30/EC edit.).

European standard EN 590 requires that national standardisation bodies (AFNOR for France, DIN for Germany, BSI for the UK, etc.) define the viscosity classifications, in accordance with national climatic and seasonal demands.

When adopted nationally, the standards are designated NF-EN 590 (France), DIN-EN590 (Germany), BS-EN590 (United Kingdom), SS-590 (Sweden), etc.

### Sulphur content

For diesel engines, sulphur in the fuel contributes to the formation of particulate matter. This is damaging to vehicles equipped with diesel particulate filters (EATS) and exhaust gas recirculation systems (EGR). It is therefore necessary to use a sulphur-free diesel fuel (< 10 ppm).



Use only diesel fuel compliant with the EN 590 standard for motor vehicles.

National regulations authorise oil companies to add a certain proportion of biodiesel to diesel fuel (fossil diesel).

Adding biodiesel to commercial diesel will increase pollutant emissions and engine wear.

If diesel fuel is stored locally in tanks, it must be filtered to ensure that it is free from any contaminants before filling the vehicle tank(s). If water is present in the diesel fuel, do not use it.

It is strictly forbidden to use AquaZole.

For specific cases, contact a RENAULT TRUCKS garage.

### **Biodiesel**

### Area of application

Use of diesel containing up to 100% EMHV (biodiesel) to standard EN14214 is prohibited for all RENAULT TRUCKS vehicles certified to Euro VI, except for DTI 5 and DTI 8 for Renault Trucks D Cab 2.1 m, and DTI 8 for Renault Trucks D Wide and C Cab 2.3 m versions under the conditions specified in this document.

# Compliance of EMHV

### **Fuel Quality**

The risks of bacterial development are higher with this type of fuel. It is therefore particularly important to observe the precautions for storage (desiccants, exposure to fresh air etc.) and cleaning of containers (see recommendations from fuel supplier). The EMHV should be used within 2 months from production.



The quality of EMHV and all precautions linked to storage and cleaning of the various containers must be specified in the contract with the user's fuel supplier.

It is strongly recommended that fuel be procured from suppliers with an acknowledged reputation in this field.

Use of "Biodiesel" (EMHV) as an alternative to diesel may therefore lead to premature and/or unexpected clogging of fuel filters.

#### Conditions of use

### Vehicle conformity

If you are using a fuel with EMHV additive, you must contact a RENAULT TRUCKS service point to ensure that the vehicle complies with the manufacturer's specifications.

#### Maintenance

Use of EMHV requires specific maintenance operations. For further information please contact a RENAULT TRUCKS service point.

### Use during winter or in cold countries

We recommend checking with the supplier about the freezing point of EMHV and ensuring a safety margin of more than 10°C.

# Diesel fuel antifreeze protection and additive

#### Use in cold weather

In order to be suitable for various weather and seasonal conditions, the EN 590 standard defines a certain number of "climatic classes" which must be selected on a national scale.

There are different grades of diesel available commercially, used seasonally (winter or summer). The filtration limit temperature **"FLT"** varies depending on the type of diesel fuel used. At temperatures approaching the filtration limit temperature, paraffin crystals are formed in the diesel which clog the fuel supply circuit.

Several winter grades may be chosen, if required, to protect vehicles in all regions throughout the winter season.

The "TLF" classes selected must be suitable for the lowest ambient temperature in a country or region.

Examples of classification by country:

- France: For protection down to -15°C: use diesel category "E".
- Germany: For protection down to -20°C: use diesel category "F".
- United Kingdom: For protection down to -15°C: use diesel category "E".
- Finland: For protection down to -26/-32/-44°C: use diesel category "ARCTIC" 1/2/4.

Oil companies are still responsible for adapting the "TLF" of their fuels to the market.

In exceptional circumstances (extremely low temperatures), a maximum of 20% kerosene may be added to diesel fuel to improve its cold properties.

The kerosene used must be sulphur-free (< 10 ppm).

20% kerosene lowers the "FLT" by 5°C.



Kerosene must only ever be used under exceptional circumstances. Adding kerosene reduces density, viscosity and the cetane index. Adding kerosene reduces lubrication performance, which accelerates wear to the injection system and the engine and risks damage to the exhaust gas aftertreatment system.



Adding petrol, used lubricants, two-stroke engine oil, cooking oil or alcohols (methanol. ethanol) is prohibited.

#### **Additives**

Modern diesel fuels contain powerful additives added by the oil companies.

Oil companies are still responsible for the quality of the fuels they sell (with or without additives).



They are not authorised to add other additives to the fuel separately.

Some suppliers offer different additives such as "Diesel boosters" that promise lower fuel consumption, improved lubrication or other beneficial effects. It is not Renault Trucks' policy to evaluate, test or validate these products.

Renault Trucks will not accept any warranty claim resulting from the use of such additives.

The use of VOME (Vegetable Oil Methyl Ester compliant with the EN 14214 standard) tends to trap water and risks an increase in bacteria and fungus.

Antibacterial additives may not be added by oil companies during fuel production.

These additives must be added to the tanks of vehicles with bacterial problems.

If it is deemed necessary to treat a vehicle with an antibacterial additive, contact a RENAULT TRUCKS garage.

The antibacterial additive supplier is responsible for its efficiency, its operation, dosing and usage intervals. Renault Trucks does not approve the product, regardless of the nature and use of an additive.

# **AdBlue**



Use only commercially-available AdBlue motor vehicles (Standard DIN 70070).

### Maintenance recommendations



When handling AdBlue, use only type-approved containers and pumps that are clean and used only for this purpose.



Do not reuse AdBlue that has been drained from a tank.



It is forbidden to replace AdBlue by any other product or add any other product to it or else vehicle pollution control will no longer be achieved and you will run the risk of damaging the post-treatment system.



If you note that the AdBlue you are using for your vehicle is contaminated, in no event should you start your vehicle; contact a RENAULT TRUCKS garage.



AdBlue must always be handled with care; it is a corrosive agent.

AdBlue must never come into contact with other chemical products.

If it is spilled on the vehicle or if there is a leak, wipe off the excess with a cloth and rinse with water.



If working on AdBlue system components, protect the electrical connectors and disconnected hoses from any AdBlue spillages using the plug kit available from the Parts store.

In case of AdBlue splashes:

- on a connector in situ, rinse with water;
- on a disconnected connector, replace the connector.



IF ANY ADBLUE IS SPLASHED ONTO THE SKIN OR INTO THE EYES, RINSE THOROUGHLY WITH WATER.

IN CASE OF INHALATION, BREATHE FRESH AIR.

CONSULT A DOCTOR IF NECESSARY.

# Exhaust gases, Euro VI engine

The particulate filter and the exhaust gas catalytic converter get hot and cool down slower than a normal silencer.

This leads to the following consequences:

 The exhaust gases become very hot when driving and when parked with the engine running.



Do not park on flammable materials such as, for example, oil, diesel, dry grass, etc.

- Exhaust gases have a different odour to the exhaust gases of an engine without a catalytic converter. The difference is more noticeable when the engine is cold.
- When starting in low temperatures (up to 5°C), a cloud of white smoke comprising water vapour may appear. This occurs more often on engines without an exhaust gas after-treatment system. Water vapour may also be produced after short stops, but is less noticeable.



Consider that this can, in exceptional cases, inconvenience other road users!



In operation, the particulate filter and the catalytic converter can reach a temperature of 625°C. Wait for approximately 2 hours before carrying out any work on the particulate filter or catalytic converter to allow the temperature to drop to an acceptable level of 50°C.

Risk of burns for operators.

### Preventive maintenance

In addition to the services provided by the RENAULT TRUCKS service points described in the maintenance programme, there are several daily operations which you must carry out.

### Lubricants

RENAULT TRUCKS recommends the use of **ECO 5** lubricants (used as original equipment) to obtain saving in terms of fuel economy.

These recommendations meet the requirements of RENAULT TRUCKS to ensure the reliability expected by its customers.

These recommendations cannot be the subject of **"compromise or negotiation"**: they are linked to the technical definition of the engines.

Non-compliance with the manufacturer's recommendations in terms of oil change intervals or the use of unsuitable lubricants will considerably reduce the operational safety factor of an engine and can cause serious incidents in the long term.

If such incidents were to occur, RENAULT TRUCKS would not accept the costs of repairing these engines, even for vehicles under warranty.

Adapt the viscosity of the oil used according to the climate conditions of the region where you use your vehicle.

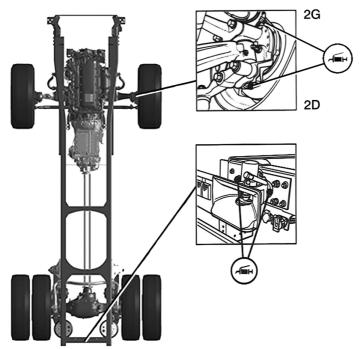
Using an oil of a lower grade will require more frequent oil changes. Your RENAULT TRUCKS garage is at your disposal to advise you.

We recommend Renault Trucks Oils.

### Engine oil filter cartridge(s)

For the correct operation of your engine and to extend its service life, use only genuine filters with a filtration surface and threshold designed by the manufacturer.

# Lubrication diagram(s)



# **Battery banks**

#### Features - maintenance

# Checking the charging status

The alternator cannot charge the battery to 100%; in optimal conditions, the battery can be charged up to 90%.

To maintain the batteries' lifespan, they must be charged externally at least once every three weeks, even if they appear to be fully charged.

For systems that use a lot of battery power when the engine is off, such as tailgate lifts, daily external charging is recommended.

- To avoid deep discharges and permanent battery changes, batteries must never be discharged with less than 50% capacity.
- · Externally recharge the batteries regularly.
- Use chargers with charge indicators and sufficient charge currents.

# Maintenance operations



Perform an external charge at least once every three weeks to maintain battery lifespan.



The battery levels must be checked every three months.

The electrolyte level must cover the plates.

For this operation, contact a RENAULT TRUCKS garage.



Battery electrolyte contains extremely corrosive sulphuric acid.

Remove any electrolyte coming into contact with the skin immediately. Wash with soap and plenty of water.

If any electrolyte is splashed into the eyes or comes into contact with a sensitive part of the body, seek medical advice.

Remember that the accumulator batteries discharge a lot of highly-explosive flammable gas. A short-circuit, a flame or spark near to a battery could cause a large explosion resulting in personal injury or damage to equipment.

### Radiator insect screen

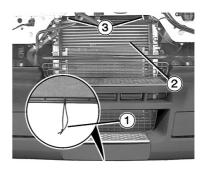
# Disassembly

Pull string (1) located under the bumper downwards then slightly towards you to free insect screen (2) from its anchorage.

### Cleaning

At the onset of spring and summer, clean the insect screen by blowing through compressed air, or with warm water.

Avoid high-pressure jets.



# Assembly

Proceed in the reverse order of disassembly.

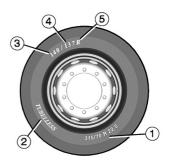
Ensure the insect screen is attached correctly.

### Depending on vehicle use

Regularly check clogging of insect screen and radiator(s).

# Tyre specifications

- 1. Tyre dimension
- 2. "Tubeless": no tube
- 3. Load rating: single wheel fitment
- 4. Load rating: twin wheel fitment
- 5. Symbol for tyre's maximum speed



### Speed ratings

The following table may be used to find the speed rating symbol applicable to replacement tyres.

Vehicle speed	Symbol
≤ 80 km/h	F
80 - 90 km/h	G
90 - 100 km/h	J
100 - 110 km/h	К
110 - 120 km/h	L
120 - 130 km/h	M



It is prohibited to install tyres with a speed rating lower than that of the tyres fitted as original equipment on the vehicle or those recommended by the manufacturer. However, it is indeed possible to install tyres with a higher speed rating.

# Maintenance operations



For any modification to tyre type, it is essential to reconfigure the braking system. Contact your nearest RENAULT TRUCKS garage.

Have the tachograph calibrated by an approved S.I.M. workshop.

# Tightening the wheels Steel wheels

Tightening order

Disc wheel rims

Wheel tightening torque(s):

650±75 Nm.

Use a 33 mm socket.

Wheel tightening control torque value: minimum 670<sup>±30</sup> Nm.





Check the tightness of the wheel mounting nuts each time after refitting: after 20 to 30 km then between 150 and 250 km.

Check the tightness of the wheel mounting nuts every 6 months, whether the wheels have been removed or not.

If, when checking, it emerges that a nut is not tightened to the minimum torque of 670<sup>±30</sup> Nm, loosen all the wheel mounting nuts and retighten them to the recommended torque and angle.

If these basic precautions are not heeded, there is a risk of the mounting nuts loosening and serious consequences may result.

# Load and pressure rating of tyres



Whenever replacing tyres, ensure that the new tyre fitment has a load index that can support the maximum axle load of your vehicle.

Tyre dimension	Load rating	Load in kg according to fitment	
i yie dimension	Single / Twin	Single	Twin
315/80 R 22.5	156 / 150 158 / 156	8,000 8,500	13,400 16,000

### Inflation pressures



Follow the tyre manufacturer's recommendations. If none are available, use the following indicative pressures temporarily. For chassis intended to be equipped with equipment likely to alter the load per axle, refer to the manufacturer's data with relation to type, brand and application. Observe the load/speed ratings written on the tyre wall.



Your vehicle is equipped with appropriate tyres. When changing fitment, ensure that the new fitment is compatible with your vehicle by contacting your RENAULT TRUCKS garage.

Rims equipped with protective valve: when removing/installing a tyre, follow the manufacturer's instructions. Make the operative aware of this.

Tyre dimension	Load in kg according to fitment		Pressure in bar
	Single	Twin	
315/80 R 22.5	6,700 7,140 7,570 8,000 7,500	11,860 12,640 13,400 - 13,400	7.0 7.5 8.0 8.5 8.0**

# **Helping Hand**

<sup>\*\*:</sup> depending on the load rating and speed symbol.

### Wheels/Tyres

### Changing wheels

Precautions to take when fitting wheels to the vehicle:

### Before fitting

Clean the wheel rims and hubs very carefully, in particular the contact surfaces (grease, earth, mud, metal swarf, overspray, etc.).

### When installing

Oil the shafts and nuts lightly (engine oil). Tighten the nuts progressively using the tool provided with the vehicle. Pull on the arm of the tool to tighten correctly.



Over-tightening could result in damage. In order to avoid exceeding the tightening torque, do not use articles such as: pipes, extension bars, etc.

#### After installation

Check the tightness of the mounting nuts each time after refitting: after 20 to 30 km then between 150 and 250 km.

If these basic precautions are not heeded, there is a risk of the mounting nuts loosening and serious consequences may result.

### Main causes of premature wear of tyres

- driving behaviour (excessive braking, driving over pot holes, etc.);
- vehicle overloading or incorrect distribution of load;
- over-inflation or under-inflation (inflate to the correct pressure for the weight per axle);
- incorrect twin fitment (always twin tyres of the same dimension, same type and same degree of wear);
- incorrect adjustment of the front axle geometry.

# Inflation pressure test

### Frequency

Tyre pressures must be checked on each refuelling or every fortnight.

#### Method

Tyre pressures should always be checked on cold tyres.

You must never deflate hot tyres.

### Safety

In-service incidents.

Whenever an impact occurs, or whenever you cannot stop quickly following a tyre puncture, it is essential to have the tyre checked promptly by a specialist.



Over-inflation or under-inflation has an impact on fuel consumption.

### Light alloy wheel rims

### Instructions for installing wheels:

To make it easier to remove the wheel at a later point, grease the hub centring area with a copper-free grease such as "FREYLUBE, ROCOL. MG or ESSO MOBY".



Only use RENAULT TRUCKS nickelled or chromed valves. When replacing a valve, grease the valve hole and the rim inner seat with grease such as FREYLUBE or ROCOL. MG or ESSO MOBY".

#### Snow chains

In some countries, the use of snow chains may differ due to the legislation in force. Comply with the legislation in force in each country.

Snow chains must be installed on driven wheels. For certain types of chains, the tension must be rechecked after several tens of metres have been covered.

Do not exceed the maximum speed authorised for driving with snow chains.

As soon as the roadway is clear, remove the snow chains to avoid damaging the tyres and also to regain optimal braking behaviour and roadholding.



If you encounter traction problems when driving with snow chains, deactivate the wheel anti-spin regulation ("ASR"); refer to the **Driving on difficult terrain** chapter.



Use only snow chains approved and recommended by RENAULT TRUCKS in order to prevent damage to the vehicle. Contact your RENAULT TRUCKS garage.

# Washing, general information

Regular cleaning helps retain the value of your vehicle. Don't forget to wash your vehicle more often in wintry conditions or after driving in a dirty environment.

The dirty water from cleaning the vehicle contains chemicals and pollutants that might harm the environment. It is recommended to use environmentally-friendly detergents and to clean the vehicle in a facility where dirty water is collected.



Be very careful when cleaning transmission components such as axles, the gearbox, motors and electrical connections

We strongly advise against washing these components with water. If you must do so, do not get the breather pipe, openings and electrical connections wet.

# Washing the bodywork

To keep your bodywork in good condition for longer and maintain the lustre of its paintwork, it is recommended to wash your vehicle regularly. Especially in winter when road salt and wet weather can cause corrosion.

The use of brushes is not recommended, in particular during the first month of use of the vehicle. Avoid using high temperature steam cleaning.

Neutral detergents are available commercially which will not affect the paintwork.

To remove greasy marks, use benzine (not vehicle petroleum).

If the aluminium components are heavily soiled, clean them in water with added nonalkaline cleaning product then rinse in fresh water.

Stop the engine and switch off the master switch before washing the vehicle.

After washing, carry out general greasing of the vehicle.

#### Front end

When the radiator grille is up, avoid any pressurized water splashes.

#### On the chassis

When washing the chassis, be particularly careful when using high-pressure jet washers.

To limit any risk of a fault, avoid stress and strain on:

- electronic or electrical modules and electrical devices;
- heater air intakes, engine intake and air filter,

- pneumatic devices,
- absorbent panels and sound-proofing screens.
- component breathers (gearbox, final drive axle, etc.),
- universal joints,
- seals of sliding sections,
- hinge pins,
- pneumatic equipment.

### High pressure cleaner

High pressure cleaners can cause damage to your vehicle. Always be very careful when using them, especially on joints, plastics, rubbers, connectors and paint.

Be careful when pressure washing the axles, seals and other moving parts, otherwise water and dirt could penetrate.

Avoid removing lubricating grease when rinsing. If this should happen, grease the vehicle components.



Limit the jet washer pressure to a maximum of 80 bar. For sound-proofing screens, limit the temperature to 50°C and maintain a minimum distance of 100 mm.



When washing the vehicle, carry out general greasing.

#### Roller washers

Before activating automatic washing, fold the frontview mirror onto the windscreen and fold the side rearview mirrors so that they are not damaged.



For the side rear-view mirrors, swivel kerb view mirror (1) to fold rear-view mirror arm (2) fully.

Once washing is complete, unfold the front-view mirror and the side rear-view mirrors.



# Steel wheel rims, care

Steel wheel rims are often exposed to different types of contaminants, such as road dirt, oil, asphalt, tar and brake dust. Regular maintenance is required in order to protect the wheel rims from discolouration, corrosion and unnecessary wear. A protecting wax is used for additional protection, for example, when driving on salted roads, in slush or in coastal environments.

Damage to the wheel rim's paint must be remedied immediately to prevent corrosion.

Clean the wheel rims regularly. First rinse with water, preferably use high-pressure washing. Use a brush or sponge to clean the wheel rim.

For stubborn dirt, an alkaline cleaning agent (pH>7) may be used.

# Cleaning the area around the particle filter



TO AVOID FIRE HAZARDS. KEEP THE AREA AROUND THE PARTICLE FILTERS CLEAN.



The particle filters and exhaust pipes can be very hot. Take care to avoid burns.

It is very important to clean the area around the exhaust system. Carefully clean all areas where impurities may build up.

In some cases, fairings may make access difficult. Pay careful attention to these areas.



# Head lamp cleaning

The head lamps are equipped with plastic glass, use a soft cloth or cotton cloth.

If this is not sufficient, use a soft (or cotton) cloth dampened with soapy water.

Rinse with a damp soft or cotton cloth then wipe gently with a dry, soft cloth.

The use of any other product is prohibited.

# Cleaning the passenger compartment

Spray with or wipe with a cloth soaked in cleaning product (soapy water).

All alcohol-based, petroleum-based and trichlorethylene products should be avoided. The use of such products would risk damaging the trim and other materials.

Lightly talc the door and window seals as well as the runners.

# Cleaning the dashboard

Use only soapy water (the use of all other products is prohibited).

# Cleaning the seats

Plastic components: use soapy water.

Fabric components: clean using degreasing product (turpentine spirit, stain remover, etc.).

**Leather components:** to soften the leather and maintain its brightness, use a damp cloth. Visit the RENAULT TRUCKS boutique for other products.

Your vehicle is equipped with a leather steering wheel, we recommend that you take care to:

- Avoid contact with harsh materials (solvent, hydro-alcoholic gel, concrete, hydrocarbons, chemical products...).
- Avoid contact with water.

# Cleaning

Leather is an organic material. Take care of it to avoid deterioration.

- Regularly clean the steering wheel with a specialized product.
- Condition the leather with a leather maintenance product recommended by RENAULT TRUCKS.
- Remove excess product with a dry cloth.



All alcohol-based, petroleum-based or trichlorethylene products should be avoided. The use of such products would risk damaging the trim and other materials.



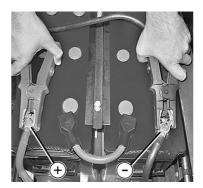
Breakdowns - quick fixes

# Starting the vehicle with external assistance

In the event of non-starting using the vehicle accumulator batteries, an external current source can be used (battery trolley or another vehicle).

#### Procedure:

- Switch off the master switch.
- Connect starter adapter to a battery trolley or to another vehicle using the extension piece provided.
- Engage the master switch.
- Actuate the starter.
- Keep the engine at an engine speed of 1,300 rpm for approximately 5 minutes.
- Switch on the dipped beam headlights before returning the engine to idle speed.
- Let the engine idle for 1 minute.
- Disconnect starter adapted from the battery trolley or the other vehicle.
- Switch off the headlights.





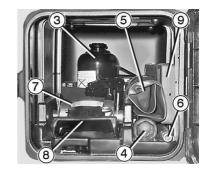
The use of a power charger to aid starting is forbidden (damage to electronic systems).

# Location of the tool kit

Your tool kit will help you tackle small hitches along your way. In the event of a more serious problem, do not hesitate to call your nearest Renault Trucks service point.

### Storing tools in the locker

- Jack (3)
- Wheel wrench (4)
- Tool kit (5)
- Cab lift control bar (6)
- Jack handle and wheel wrench (6)
- Towing yoke (7)
- Jack fitting (8)
- Warning triangle (9)



# Using the jack

Raising your vehicle is a hazardous operation. If in doubt, contact the nearest Renault Trucks service point.

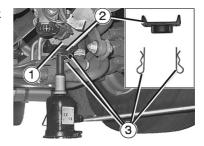
### Front jacking points (1)

It is essential to use adapter (2), attaching it to the jack head using the two pins (3).

Position the jack as close as possible to the axle.



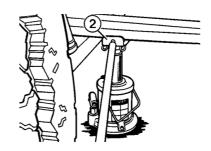
Air suspension: put the suspension in the low position.





- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK!
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- FIRMLY CHOCK THE WHEELS THAT REMAIN ON THE GROUND.
- RELEASE THE BRAKES ON THE WHEEL TO BE REPLACED.

If necessary, use the jack bar to release adapter (2).



### Rear jacking points (1)



Air suspension: put the suspension in the low position.

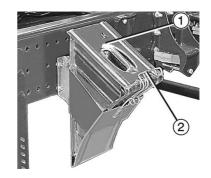


- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK!
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- FIRMLY CHOCK THE WHEELS THAT REMAIN ON THE GROUND.
- RELEASE THE BRAKES ON THE WHEEL TO BE REPLACED.



### Wheel chocks

To remove chock (1), unfasten clip (2). During installation, ensure that chock (1) is in the correct position and fasten clip (2).



### Tightening the wheels

Refer to the maintenance operations section, see Tightening the wheels page 268.

# Replacing a wheel

In the event of a puncture, you must use a spare wheel.

Be careful, there are certain risks involved in changing a wheel. Consult the chapter on changing a wheel or, if in doubt, call the nearest service point.

When you handle the spare wheel or the wheel to be changed, be careful and anticipate the risk of the wheel falling at each stage.

Stop the vehicle in a suitable place, without causing a traffic disruption, so that you can move around the vehicle without danger for yourself or others.

The ground must be flat and stable.

Stop the engine.

Activate the parking brake. Refer to the "Parking brake" chapter.

Switch on the hazard warning lights.

Switch off the ignition.

To locate the safety vest, warning triangle, hazard lamp and tool kit, refer to "Location of jack and tool kit" chapter.

Put on the safety vest before going to position the safety triangle and the hazard lamp at a sufficient distance away.

Chock the vehicle. Refer to the "Wheel chocks" chapter.

If necessary, unload part of the cargo to abide by the weight limit for the lifting equipment.

Place the jack under the vehicle below a jacking point. Use the recommended jacking points. Refer to the chapter "Use of the jack".

Vehicle fitted with pneumatic suspension: put the suspension in the low position, and clamp it there with a strap.

With the wheel still on the ground, loosen the wheel nuts without removing them.

Release the brakes on the wheel that is to be replaced, otherwise there is risk that the brake drums may become oval.



UNCONTROLLED LOWERING OF THE VEHICLE COULD RESULT IN SERIOUS MATERIAL DAMAGE, SERIOUS INJURY OR EVEN DEATH.

- NEVER MOVE BELOW THE VEHICLE WHEN IT IS HELD UP ON A JACK.
- PLACE THE JACK ON A FIRM, HORIZONTAL SURFACE WITH GOOD ADHESION.
- THE JACK MUST ONLY BE USED TO LIFT THE VEHICLE FOR A BRIEF TEMPORARY PERIOD.
- THE JACK MAY LOWER OR COLLAPSE IF THE VEHICLE IS SUPPORTED FOR TOO LONG OR IF THE VEHICLE MOVES.
- THE JACK MUST ONLY BE POSITIONED AT THE RECOMMENDED JACKING POINTS.
- ONLY USE THE TOOLS PROVIDED IN THE RENAULT TRUCKS TOOL KIT.
- NEVER START THE VEHICLE, MOVE THE BODY OR CLIMB ONTO OR INTO THE VEHICLE FOR AS LONG AS IT IS LIFTED.

Using the jack provided with the tool kit, lift the vehicle so that the wheel to be replaced, free from load, is no longer in contact with the ground.

Completely remove the wheel nuts, then pull the wheel off.



Be careful not to damage the threads of the wheel study when removing/fitting the wheel.



BE AWARE OF THE RISK OF THE WHEEL FALLING OFF AND OF THE HINDRANCE IT COULD CAUSE ON THE CARRIAGEWAY.



FOR YOUR SAFETY AND THAT OF OTHERS, USE ONLY THE TOOLS AND WHEELS SUPPLIED BY RENAULT TRUCKS THAT ARE RECOMMENDED FOR YOUR VEHICLE.

Carefully position the new wheel, taking care not to damage the studs. Refer to the chapter "Tyre load index and pressures", section "wheel and tyre".

Tighten the wheel. Refer to the "Tightening of wheels" chapter.

Check the tyre pressures.

Before setting off again, remove the strap and put the suspension back into the driving position.

# Tightening the wheels

Refer to the maintenance operations section, see Tightening the wheels page 268.

## **Towing**

It is sometimes necessary to tow your vehicle. To avoid damage, pay close attention to the instructions in this manual.

If in doubt, call your Renault Trucks service point.

If your vehicle has to be towed, use the towing eye supplied with your vehicle's on-board tool kit.

Unclip blanking plug (1) and screw in eye (2).





Eye (2) mounted on the front cross member is designed for towing on the road under normal conditions.

Releasing a vehicle that is stuck with its drive wheels spinning in soft ground or mud puts a much more significant strain on the yoke.

In this case, use suitable lifting equipment.

If necessary, an observer on the ground will guide the manoeuvre, possibly using a radio transmitter. Towing should be carried out with the engine running.

If the vehicle engine is faulty:

- Neutralise the brake cylinders manually if there is no air pressure.
- The steering is heavy because the power-assisted steering system is not operational.



Chock the vehicle wheels.

21DJ002535 285



To avoid damage to the gearbox, the drive shaft must be removed when towing with the drive wheels on the ground.

- Put the gearbox in neutral.
- Remove the transmission.
- Use the towing eye.

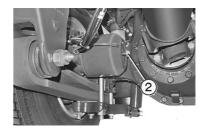




Chock the vehicle wheels.

#### Release the parking brake

In the event of accidental loss of pressure, proceed as follows to move the vehicle (towing): using a 24 mm wrench, unscrew bolt (2) on each brake cylinder until the road wheels are free.



The protrusion length X of bolt (2) varies (15 **mm** or 65 **mm**) depending on the type of brake cylinder (1).



Depending on your vehicle's equipment



Chock the vehicle wheels.



286 21DJ002535

### Release the parking brake

In the event of accidental loss of pressure, proceed as follows to move the vehicle (towing): using a 24 mm wrench, loosen bolt (2) on each brake cylinder in an anti-clockwise direction until the road wheels are free; the red mark should be exposed.

Depending on your vehicle's equipment

Recommissioning: pressurise the circuit with a pressure of approximately 5 bar. Offer up bolt (2) into contact with the cylinder and tighten it to a torque of 75 Nm or turn it clockwise and tighten it to a torque of 75 Nm; red marking (3) should be obscured.

21DJ002535 287

### Access to the Driver Guide



#### To use the Driver Guide:

 Go to: https://driverguide.renault-trucks.com/

or

scan the QR code to find the driver guide app.

or

 search for "...Renault Trucks Driver Guide" in your app download site.



You will find all the necessary information relevant to your specific Renault Trucks vehicle.

We reserve the right to make changes to this publication in the interests of constantly improving our output. The digital version will always contain the most up-to-date information.

288 21DJ002535



290 21DJ002535

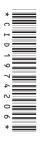
"		Before getting into the vehicle	146
"ASR" Anti-slip regulation		Biodiesel	259
system 187	, 220	Bleed water on DTI 11 vehicle	86
"EBS" system faults	190	Bluetooth®	112
"EBS" system	187	Bulbs	241
"ESC" system	188		
"Rear drive axle(s)" inter-		С	
wheel differential lock	219	Cab access	24
_		Cab overhead lights	96
Α		Cab tilting	35
Adaptive cruise control	173	Calls with the Bluetooth®	
AdBlue level indicator	150	hands-free system	108
AdBlue tank(s)	29	Child safety	129
AdBlue	261	Cleaning the dashboard	275
Additional driving information	77	Cleaning the passenger	
air conditioning	115	compartment	275
Air pressure indicator in		Cleaning the seats	275
braking circuit	153	Combined lights and horn	- 4
Air suspension	227	stalk switch	54
Anti-lock braking system		Coolant level	147
"ABS"	187	5	
AT 2000 ST parking heater fault codes	124	D	
		Dashboard	44
AT 2000 ST parking heater	122	De-icing door mirrors	57
Audio (settings)	85	Diagnostic and Infomax	
Audio settings	109	"OBD" socket	232
Automatic emergency braking system (AEBS)	182	Diesel fuel antifreeze protection and additive	260
Automatic regeneration	197	Digital tachograph	71
Auxiliary	112	Display brightness setting	84
		Display test	157
В		Doors	17
Battery banks	265	Double locking switches	53

Driving on difficult terrain with the Optidriver gearbox	221	Front windscreen wiper blades	255
		Fuel heater	137
E		Fuel level indicator	150
Electric window controls	93	Fuel tank(s)	26
Electrically-controlled		Fuel	258
door mirrors	56	Fuses	248
Electronic speed limiter	178		
Emergency brake assist	188	G	
Engine idle adjustment device	163	General operating instructions for	
Engine oil level check	147	commercial vehicles	6
Engine oil level gauge	149	Generalities	195
Engine start-up	161	Geolocation	166
Engine stop	225		
engine, operating curves	168	Н	
Equipment (information display message)	86	Head lamp cleaning heating	275 115
Equipment message	86	Helping Hand	270
Exhaust brake and "Optibrake" engine brake (with Optidriver gearbox)	217	Hydraulic power-assisted steering	166
Exhaust gases, Euro VI		ı	
engine	263	I	
Expert menu	86	identification plates	240
Expert	86	Ignition switch	157
_		Immobilizer	156
F		Information (display)	86
Fast idling device	164	Information display brightness	84
Fault(s) display	158	Information display,	00
First aid kit	130	expert menu	86
Flip key fob	16	Information display	86
Forward view mirror	57	Instrument panel	60

# **INDEX**

K		0	
Key to switches	46	Operating speed	167
Key to warning pictograms	62	Optidriver gearbox	202
Keys	16		
		Р	
L		Parking brake	193
Label read mode	27	Parking heater	121
Lane departure warning system (LDWS)	179	Particulate filter clogging indicator	152
Languages selected	84	Power and engine torque	
Living	92	curve	168
Load and pressure rating		Power take-off	232
of tyres	268	power	168
Location of radio peripherals	113	_	
Location of the jack and tool kit	204	R	
	281 16	Radiator insect screen	266
Locking the doors	264	Radio/information display	
Lubricants	265	remote control	101
Lubrication diagram(s)	200	radio	98
M		Radio See also <i>switching on</i>	103, 104
Maintenance display	159	Reduced display	84
Manual acceleration on		Reference guide for radio	98
difficult terrain with	222	Remote control unit	228
Optidriver gearbox	198	Replacing a wheel	283
Manual regeneration	31	Retarder	215
Master switch	31	Reversing buzzer	187
Meaning of the logos shown on the labels	27	Roof ventilation hatch	94
Menus and submenus	80	Running-in	136
Multifunction information	00		
display	76	S	
		Safety	195
		Screen wash level	149

Seat belts	128	Use during winter or in	
Seats	40	cold countries	136
Serial numbers on the vehicle	240	Use in dusty environments	137
Setting the time	83	Using the jack	281
Sound level adjustment	85	USPWT	283
Speed limiter	169		
Starting the vehicle with		V	
external assistance	280	Vehicle identification	240
Starting with "electronic	400	Vehicle with adjustable	
starter" function	162	rear suspension	228
Statutory test display	158	Ventilation - heater	115
Steel wheel rims, care	274	ventilation	115
Steering fluid level	148		
Steering wheel adjustment	58	W	
Storage compartment(s)	94	Warning messages	69
<b>-</b>		Warnings	13
Т		Warranty	257
Tablet holder	96	Washing the bodywork	272
Telephone cradle	114	Water (drain) on DTI 11	
Test operation	231	vehicle	86
Tightening the wheels	268	Welcome on board your	_
Time (setting)	83	RENAULT TRUCKS vehicle	6
torque	168	Windscreen access	24
Towing	285	Windscreen wash/wipe control	56
Turbocharger	137		
Tyre specifications	267		
Tyres	146		
U			
USB	110		
Use at high altitudes	137		
Use during summer or in hot countries	137		





\*CID1974206\*

21DJ002535 GBR PCA2 BLV-L7 30043-39896-3-03



#### **RENAULT TRUCKS**

Société par Actions Simplifiée à associé unique au capital de 50 000 000€

Siège social : 99, route de Lyon 69800 Saint-Priest - France
Siret 954 506 077 00 120 - RCS LYON B 954 506 077

renault-trucks.com